



June 5, 2018



Environmental Protection Agency BUREAU OF AIR

Division of Air Pollution Control-Permit Section Illinois Environmental Protection Agency 1021 North Grand Avenue East Springfield, Illinois 62702

Re: Construction Permit Application for Sterigenics Willowbrook I and II Facility I.D. No: 043110AAC

To Whom It May Concern:

Enclosed please find a Construction Permit Application to route the existing back vents on our commercial sterilization units to existing emissions control equipment in our Willowbrook facility. We are requesting this modification to reduce our emissions of Ethylene Oxide (EO) and Propylene Oxide (PO). We have determined that the proposed emissions reduction will reduce our potential to emit to less than major source status.

The Willowbrook I sterilization chambers (SC-1, SC-2, SC-3 and SC-5) and Willowbrook II sterilization chambers (SC-4) exhaust via a vacuum pump and backvents. The backvent emissions are exhausted uncontrolled to atmosphere as allowed. This modification requests to duct these existing backvents to existing emission control devices and to reduce the emission limits to reflect potential emissions. In addition, the current emission limit for Willowbrook I Aeration room exceeds potential to emit and this modification requests this emission limit to reflect potential emissions.

We therefore request the agency's approval to connect our existing backvents to the existing emissions control devices in Willowbrook I and II and reduce our emission limitations to reflect potential to emit. Enclosed are the necessary forms/descriptions of the process and emissions. We have also enclosed a check for five hundred dollars (\$500) along with the Fee Determination Form 197. Please do not hesitate to contact me to further discuss this matter. You can reach me at 630-928-1724 or email: lhartman@sterigenics.com.

Best Regards,

Laura Hartman Manager EH&S

Enclosures:

Laura Harton

S .

## Illinois Environmental Protection Agency Division Of Air Pollution Control — Permit Section P.O. Box 19506 Springfield, Illinois 62794-9506

# Construction Permit Application for a Proposed Project at a CAAPP Source

| * | For Illinois EPA use only |
|---|---------------------------|
|   | ID No.:                   |
|   | Appl. No.:                |
|   | Dale Rec'd:               |
|   | Chk No./Amt:              |

This form is to be used to supply general information to obtain a construction permit for a proposed project involving a Clean Air Act Permit Program (CAAPP) source, including construction of a new CAAPP source. Detailed information about the project must also be included in a construction permit application, as addressed in the "General Instructions For Permit Applications," Form APC-201.

| Proposed Project  1. Working Name of Proposed Project: Sterilizer Back Vent Emissions Control  2. Is the project occurring at a source that already has a permit from the Bureau of Air (BOA)?  □ No 図 Yes If Yes, provide BOA ID Number: 043110AAC  3. Does this application request a revision to an existing construction permit issued by the BOA?  □ No 図 Yes If Yes, provide Permit Number: 11050010&05120010  4. Brief Description of Proposed Project: Modify the duct for the existing back vents to route emissions to existing scrubbers with dry beds. Currently the back vent emissions are uncontrolled and exhausted directly to atmosphere. Also update the emission limits to match the new potential to emit based on controlled emissions.  Source Information  1. Source name:* Sterigenics US, LLC  2. Source street address:* 7775 Quincy Street and 830 Midway  3. City: Willowbrook  4. County: DuPage  5. Zip code:* 60521  ONLY COMPLETE THE FOLLOWING FOR A SOURCE WITHOUT AN ID NUMBER.  6. Is the source located within city limits? ☑ Yes ☑ No If no, provide Township Name:  7. Description of source and product(s) produced: Commercial Sterilizer of medical products and spices.  SIC: 7389 or NAICS: 561910 |  |  |  |  |  |
|---|--|--|--|--|--|
| Sterilizer Back Vent Emissions Control  2. Is the project occurring at a source that already has a permit from the Bureau of Air (BOA)?    No   No   Yes   If Yes, provide BOA ID Number; 043110AAC   |  |  |  |  |  |
| 2. Is the project occurring at a source that already has a permit from the Bureau of Air (BOA)?    No   Yes   If Yes, provide BOA ID Number: 043110AAC  |  |  |  |  |  |
| No   Yes   If Yes, provide BOA ID Number: 043110AAC   |  |  |  |  |  |
| A. Brief Description of Proposed Project: Modify the duct for the existing back vents to route emissions to existing scrubbers with dry beds. Currently the back vent emissions are uncontrolled and exhausted directly to atmosphere. Also update the emission limits to match the new potential to emit based on controlled emissions.  Source Information  1. Source name: Sterigenics US, LLC  2. Source street address: 7775 Quincy Street and 830 Midway  3. City: Willowbrook  4. County: DuPage  5. Zip code: 60521  ONLY COMPLETE THE FOLLOWING FOR A SOURCE WITHOUT AN ID NUMBER  6. Is the source located within city limits? If no, provide Township Name:  7. Description of source and product(s) produced: Commercial Sterilizer of medical products and spices.  8. Primary Classification Code of source:  |  |  |  |  |  |
| Currently the back vent emissions are uncontrolled and exhausted directly to atmosphere. Also update the emission limits to match the new potential to emit based on controlled emissions.    Source Information  |  |  |  |  |  |
| 1. Source name: Sterigenics US, LLC  2. Source street address: 7775 Quincy Street and 830 Midway  3. City: Willowbrook  4. County: DuPage  5. Zip code: 60521  ONLY COMPLETE THE FOLLOWING FOR A SOURCE WITHOUT AN ID NUMBER  6. Is the source located within city limits?  If no, provide Township Name:  7. Description of source and product(s) produced: Commercial Sterilizer of medical products and spices.  8. Primary Classification Code of source: Commercial Sterilizer of medical products and spices.   |  |  |  |  |  |
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| 3. City: Willowbrook  4. County: DuPage  5. Zip code:*60521  ONLY COMPLETE THE FOLLOWING FOR A SOURCE WITHOUT AN ID NUMBER  6. Is the source located within city limits?  If no, provide Township Name:  7. Description of source and product(s) produced:  Commercial Sterilizer of medical products and spices.   |  |  |  |  |  |
| ONLY COMPLETE THE FOLLOWING FOR A SOURCE WITHOUT AN ID NUMBER  6. Is the source located within city limits?  Yes  No If no, provide Township Name:  7. Description of source and product(s) produced:  8. Primary Classification Code of source:  Commercial Sterilizer of medical products and spices.   |  |  |  |  |  |
| 6. Is the source located within city limits? Yes No If no, provide Township Name:  7. Description of source and product(s) produced:  8. Primary Classification Code of source:  Commercial Sterilizer of medical products and spices.  |  |  |  |  |  |
| If no, provide Township Name:  7. Description of source and product(s) produced:  8. Primary Classification Code of source:  Commercial Sterilizer of medical products and spices.  |  |  |  |  |  |
| 7. Description of source and product(s) produced: Commercial Sterilizer of medical products and spices. SIC: 7389 or NAICS: 561910  |  |  |  |  |  |
| SIC: 7389 or NAICS: 561910  |  |  |  |  |  |
|   |  |  |  |  |  |
| 9. Latitude (DD:MM:SS.SSSS): 10. Longitude (DD:MM:SS.SSSS):   |  |  |  |  |  |
| * Is information different than previous information? Yes No If yes, then complete Form CAAPP 273 to apply for an Administrative Change to the CAAPP Permit for the source.   |  |  |  |  |  |
| Identification of Permit Applicant  |  |  |  |  |  |
| 1. Who is the applicant?     2. All correspondence to: (check one)                       Operator                      Operator   |  |  |  |  |  |
| Applicant's FEIN:     4. Attention name and/or title for written correspondence:     5-3323502     Laura Hartman, EHS Manager   |  |  |  |  |  |

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

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|  | Owner Inform  | iation*                                 |                                     |  |  |  |  |
|--|---|---|-------------------------------------|--|--|--|--|
| 1. Name: Sterigenics US, LLC   | •   |   |                                     |  |  |  |  |
| 2. Address; 2015 Spring Road , Suite 650   |   |   |                                     |  |  |  |  |
|  |   |   |                                     |  |  |  |  |
| 3. City: Oak Brook   | 4. State: II  | www                                     | 5. Zip code: 60523                  |  |  |  |  |
|  |   |   | ' 0UD43                             |  |  |  |  |
| * Is this information idifferent than pre<br>If yes, then complete Form CAAPP 23 | vious information? 💹 Ye<br>73 to apply for an Administ    | s 🔯 No<br>rative Change                 | to the CAAPP Permit for the source. |  |  |  |  |
|  |   |   | :                                   |  |  |  |  |
|  | r Information (if di                                      | ferent froi                             | n owner)*                           |  |  |  |  |
| Name Sterigenics US, LLC   |   |   |                                     |  |  |  |  |
| 2. Address: 7775 Quincy Street a   | nd 830 Midway   | 00000000000000000000000000000000000000  |                                     |  |  |  |  |
|  |   |   |                                     |  |  |  |  |
| 3 Civ  | 4. State: L   |   | 5. Zip code: <sub>60523</sub>       |  |  |  |  |
| 3. City:Willowbrook  |   | *************************************** |                                     |  |  |  |  |
| * is this information different than previous then complete Form CAAPP 27        | /ious information? [_] Ye:<br>/3 to apply for an Adminis! | i 🗍 No<br>ralive Change                 | to the CAAPP Permit for the source. |  |  |  |  |
| 90   |   |   | 8.5                                 |  |  |  |  |
| Preferred technical contact: (ch)  1. Preferred technical contact: (ch)          | chnical Contacts f<br>ieck one)                           | or Applica<br>icant's contai            |                                     |  |  |  |  |
| ,  | ,   | *************************************** |                                     |  |  |  |  |
| Applicant's technical contact per Laura Hartman                                  | erson for application:                                    |   |                                     |  |  |  |  |
| 3. Contact person's telephone nu   | mber(s)   | ,                                       | person's e-mail address:            |  |  |  |  |
| 630-928-1724  5. Consultant for application:                                     |   | <u> </u>                                | Dsterigenics.com                    |  |  |  |  |
| n/a  | -2-5  |   |                                     |  |  |  |  |
| <ol> <li>Consultant's telephone numbe<br/>n/a</li> </ol>                         | r(s):   | 7. Consulta<br>n/a                      | ni's e-mail address:                |  |  |  |  |
|  |   | *************************************** |                                     |  |  |  |  |
| Other  | Addresses for the   | Permit Ar                               | plicant                             |  |  |  |  |
| ONLY COMPLETE  | THE FOLLOWING FOR A S                                     | OURCE WITH                              | OUT AN ID NUMBER                    |  |  |  |  |
| <ol> <li>Address for billing Site Fees for</li> </ol>                            | r the source: 🔲 So  | urce 🔲 (                                | Other (provide below):              |  |  |  |  |
|  |   |   |                                     |  |  |  |  |
| 2. Contact person for Site Fees:   |   | 3. Contact                              | person's telephone number;          |  |  |  |  |
| 4. Address for Annual Emission F   | dan jaga kan dan dan dan dan dan dan dan dan dan d        |   | Other (provide below):              |  |  |  |  |
| 4. Address for Annual Emission F   | vepon norme source;                                       | ™ ⊃onice                                | T Ansi (hoalde below).              |  |  |  |  |
|  |   |   |                                     |  |  |  |  |
| 5. Contact person for Annual Emi   | ssion Report:   | 6. Contact                              | person's telephone number:          |  |  |  |  |

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| Review Of Contents of the Application  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| NOTE: ANSWERING "NO" TO THESE ITEMS MAY RESULT IN THE APPLICATION BEING DEEMED INCOMPLETE  |  |  |  |  |  |  |
| 1. Does the application include a narrative description of the proposed project?   | Yes □ No   |  |  |  |  |  |
| Does the application clearly identify the emission units and air pollution control equipment that are part of the project?   | X Yes □ No   |  |  |  |  |  |
| 3. Does the application include process flow diagram(s) for the project<br>showing new and modified emission units and control equipment,<br>along with associated existing equipment and their relationships?   | X Yes No   |  |  |  |  |  |
| 4. Does the application include a general description of the source, a plot plan for the source and a site map for its location?   | ☐ Yes ☐ No ※ N/A* * Material previously provided   |  |  |  |  |  |
| 5. Does the application include relevant technical information for the proposed project as requested on CAAPP application forms (or otherwise contain all relevant technical information)?   | X Yes □ No   |  |  |  |  |  |
| 6. Does the application include relevant supporting data and information for the proposed project as provided on CAAPP forms?  | ▼ Yes □ No   |  |  |  |  |  |
| 7. Does the application identify and address all applicable emission<br>standards for the proposed project, including:<br>State emission standards (35 IAC Chapter I, Subtitle B);<br>Federal New Source Performance Standards (40 CFR Part 60)?   | ⊠ Yes □ No   |  |  |  |  |  |
| <ol><li>Does the application address whether the project would be a major<br/>project for Prevention of Significant Deterioration, 40 CFR 52.21?</li></ol>   | Yes No N/A   |  |  |  |  |  |
| <ol> <li>Does the application address whether the project would be a major<br/>project for "Nonattainment New Source Review," 35 IAC Part 203?</li> </ol>  | Yes □ No □ N/A   |  |  |  |  |  |
| 10. Does the application address whether the proposed project would potentially be subject to federal regulations for Hazardous Air Pollutants (40 CFR Part 63) and address any emissions standards for hazardous air pollutants that would be applicable?   | X Yes ☐ No ☐ N/A* * Source not major ☐ Project not major  X  |  |  |  |  |  |
| 11. Does the application include a summary of annual emission data for different pollutants for the proposed project (tons/year), including: 1) The requested permitted emissions for individual new, modified and affected existing units*, 2) The past actual emissions and change in emissions for individual modified units* and affected existing units*, and 3) Total emissions consequences of the proposed project? (* Or groups of related units) | X Yes ☐ No ☐ N/A     *The project does not involve an increase in emissions from new or modified emission units. |  |  |  |  |  |
| 12. Does the application include a summary of the current and requested potential emissions of the source (tons/year)?   | X Yes  |  |  |  |  |  |
| 13. Does the application address the relationships and implications of the proposed project on the CAAPP Permit for the source?  | X Yes  |  |  |  |  |  |
| 14. If the application contains information that is considered a TRADE SECRET, has it been properly marked and claimed and all requirements to properly support the claim pursuant to 35 IAC Part 130 been met? Note: "Claimed" information will not be legally protected from disclosure to the public if it is not properly claimed or does not qualify as trade secret information.   | ☐ Yes ☐ No 👿 N/A* * No information in the application is daimed to be a TRADE SECRET                             |  |  |  |  |  |
| 15. Are the correct number of copies of the application provided? (See Instructions for Permit Applications, Form 201)   | ⊠ Yes □ No   |  |  |  |  |  |
| 16. Does the application include a completed "FEE DETERMINATION<br>FOR CONSTRUCTION PERMIT APPLICATION," Form 197-FEE, a<br>check in the amount indicated on this form, and any supporting<br>material needed to explain how the fee was determined?   | ⊠ Yes □ No   |  |  |  |  |  |

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# Signature Block Authorized Signature: ! certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete and that I am a responsible official for the source, as defined by Section 39.5(1) of the Environmental Protection Act. BY: VP of EH&S AUTHORIZED SIGNATURE TITLE OF SIGNATORY Kathleen Hoffman TYPED OR PRINTED NAME OF SIGNATORY DATE

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| VIII.       | CAAPP 197 – Fee Form   | Page 7  |

#### EXHIBIT 199-1

#### NARRATIVE DESCRIPTION OF PROPOSED PROJECT- BACKVENT CONTROL

The facility is a medical sterilization facility located at 7775 Quincy Street (WBI) and 830 Midway (WBII), Willowbrook, Illinois.

The sterilization facility utilizes ethylene oxide (EO) as the principle sterilant gas, although propylene oxide is sometimes used. All associated equipment and processing areas associated with sterilant use are covered under our current CAAPP Permit #95120085.

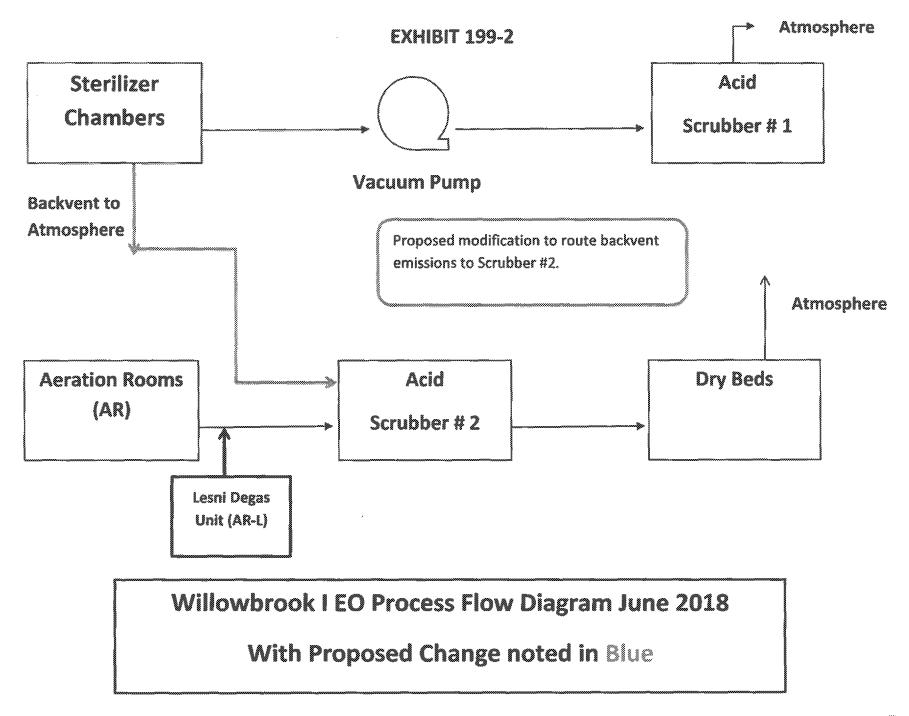
As part of the sterilization process, products are sterilized in one of the sterilization chambers. The sterilization chambers exhaust the majority of emissions through the vacuum pumps and the vacuum pump emissions are controlled by existing scrubbers. The remaining emissions from the sterilization chambers are exhausted, uncontrolled, to atmosphere through back vents.

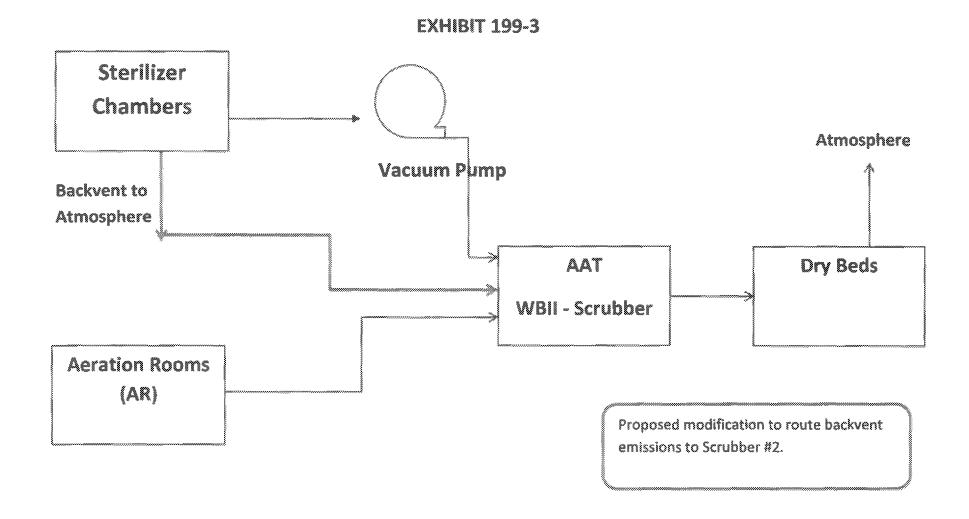
Once the sterilization chamber process is complete, the products are removed from the sterilization chamber and placed into aeration rooms to further off gas low levels of EO. The aeration rooms exhaust emissions to existing acid scrubbers with dry bed reactors.

This permit application is requesting to duct the back vent emissions of the permitted chambers to the existing acid scrubbers with dry bed reactors. In Willowbrook I, the back vents for emission units SC-1, 2, 3, and 5 would be ducted to the existing Advanced Air Technologies (AAT) wet acid scrubber with dry bed reactor (Scrubber #2). In Willowbrook II, the back vents for emission units SC-4 would be ducted to the existing WB II Advanced Air Technologies (AAT) wet acid scrubber with dry bed reactor (WBII-Scrubbers).

In addition, this permit application is requesting to modify the existing EO and Volatile Organic Material (VOM) emission limits to align with the potential emissions. Emission calculations are enclosed and include 2017 emissions and potential emissions based on current EO and VOM usage limitations. Please refer to the emissions table in Exhibit 220A and 220B.

This proposed project would reduce the uncontrolled EO emissions from the back vents by a control efficiency of at least 99%, and therefore would not be a major modification pursuant to 40 CFR 52.21 or 35 IAC Part 203. Also, the modification would reduce the potential emissions of Hazardous Air Pollutants to less than 10 tons per year and therefore, the facility would no longer be considered a major source under CAAPP regulations.





Willowbrook II EO Process Flow Diagram June 2018
With Proposed Change noted in Blue

#### List of Emission Units Covered in Permit Application

A permit exists for the emission units referred to in this permit application. This permit application requests to duct existing backvents from the Willowbrook I and II Sterilization Chambers listed below to existing control devices. In addition, this permit application requests to modify the emission limits for the Willowbrook I and II Sterilization Chambers and Willowbrook I Aeration Room listed below to reflect potential emissions.

List of Sterilization Chambers to duct backvent to existing controls:

- 1. VB1 SC1 Six 6-pallet Chambers
- 2. WB1 SC2 Six 13-pallet Chambers
- 3. WB1 SC3 One 3 pallet Chamber
- 4. WB1 SC5 One 1 pallet Chamber
- 5. WB2 SC4 Three 13 pallet and One 26 pallet Chamber

List of emission units to modify permitted emission limits:

- 1. WB1 SC1 Six 6-pallet Chambers
- 2. WB1 SC2 Six 13-pallet Chambers
- 3. WB1 SC3 One 3 pallet Chamber
- 4. WB1 SC5 One 1 pallet Chamber
- 5. WB1 AR Three Aeration Rooms
- 6. W82 SC4 Three 13 pallet and One 26 pallet Chamber

page 9



#### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION P.O. BOX 19506 SPRINGFIELD, ILLINOIS 62794-9506

| EQR A                                   | <u> PPLICAN</u> | its use                                 |
|---|-----------------|---|
| Revision #                              | ļ:              | www.                                    |
| Date:                                   |                 |   |
| Page                                    | C               | )f                                      |
| Source De                               | signation       |   |
| 200000000000000000000000000000000000000 | ~~~~~           | 200000000000000000000000000000000000000 |

### PROCESS EMISSION UNIT

| ID NUMBER:  |   | 300000000000000000000000000000000000000 | 000900000000000000000000000000000000000 | ***************************************        |
|-------------|---|---|---|--|
| EMISSION PO | NT#                                     | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 100000hnnnnnnnnnnooooooooo              | <b>(</b> €000000000000000000000000000000000000 |
| DATE:       | 000000000000000000000000000000000000000 | 000000000000000000000000000000000000000 |   | ~~~~~~   |

| SOURCE IN                             | FORMATION                                 |
|---------------------------------------|---|
| 1) SOURCE NAME:                       |   |
| Sterigenics US, LLC                   |   |
| 2) DATE FORM<br>PREPARED: 30 May 2018 | 3) SOURCE ID NO.<br>(IF KNOWN): 043110AAC |

| GENERAL INFORMATION  |                                      |  |  |  |
|--|--------------------------------------|--|--|--|
| 4) NAME OF EMISSION UNIT: (6) Ethylene Oxide/Propylene oxide Sterilization Chambers (6 pallet capacity) SC-1 |                                      |  |  |  |
| 5) NAME OF PROCESS:  |                                      |  |  |  |
| Sterilization of medical products and spices   |                                      |  |  |  |
| 6) DESCRIPTION OF PROCESS:   |                                      |  |  |  |
| Chemical Sterilization   |                                      |  |  |  |
| 7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR A   | CTIVITY ACCOMPLISHED:                |  |  |  |
| Sterilized Medical Supplies and Treated Spices   |                                      |  |  |  |
| 8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT:  |                                      |  |  |  |
| Sterilizer Chambers  |                                      |  |  |  |
| 9) MANUFACTURER OF EMISSION UNIT (IF KNOWN):   |                                      |  |  |  |
| Unknown  |                                      |  |  |  |
| 10) MODEL NUMBER (IF KNOWN);   | 11) SERIAL NUMBER (IF KNOWN):        |  |  |  |
| unknown  | unknown                              |  |  |  |
| 12) DATES OF COMMENCING CONSTRUCTION,  | a) CONSTRUCTION (MONTH/YEAR):        |  |  |  |
| OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED)                          | June 1984                            |  |  |  |
| ,  | b) OPERATION (MONTH/YEAR):           |  |  |  |
|  | May 1985                             |  |  |  |
|  | c) LATEST MODIFICATION (MONTH/YEAR): |  |  |  |
|  | November 1990                        |  |  |  |

13) DESCRIPTION OF MODIFICATION (IF APPLICABLE):

The sterilization chambers includes the chamber vent (via vacuum pump) and the chamber exhaust vent (backvent) as one emission unit. The chamber exhaust vent currently exhausts uncontrolled to atmosphere. This modification proposes to control the backvent with scrubber #2 and dry bed reactor.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINO'S REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE 10

Printed on Recycled Paper 220-CAAPP

FOR APPLICANT'S USE

| 14) DOES THE EMISSION UNIT HA  | VE MO              | RE THAN ON   | E MOD   | E OF (                                    | PERATI  | ON?                                    | ***************************************    |   | <br>ES                                  | 7  | NO                                      |
|--|--------------------|--|---|---|---|--|--|---|---|--|---|
| IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE PROCESS EMISSION UNIT FORM 220-CAAPP MUST BE COMPLETED FOR EACH MODE):   |                    |  |   |   |   |  |  | 146                                     |   |  |   |
| ,  | udes               | the chambe   | ar ven  | t (via                                    | vacuum  | DUI                                    | no) and the                                | char                                    | nber                                    | exhaus                                     | st                                      |
| The sterilization chambers includes the chamber vent (via vacuum pump) and the chamber exhaust<br>vent (backvent) as one emission unit. The chamber backvent modification is covered by this form. The   |                    |  |   |   |   |  |  |   |   |  |   |
| chamber vent is controlled by W81 Acid Scrubber 1 and remains unchanged.   |                    |  |   |   |   |  |  |   |   |  |   |
| 15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT): |                    |  |   |   |   |  |  |   |   |  |   |
| The chamber backvent is curre  |                    |  |   |   |   |  | -  | at the                                  | chan                                    | nber                                       |   |
| exhaust vent (backvent) to the   | existi             | ing Acid Sc  | rubbe   | r (scn                                    | ıbber#2   | 2) w                                   | ith Dry Bed                                | Reac                                    | dor, 1                                  | The  |   |
| information provided below is a  | requir             | ed for the e   | xistin  | g cont                                    | rol devi  | Ce.                                    |  |   |   |  |   |
| 16) WILL EMISSIONS DURING STAI<br>RATE PURSUANT TO A SPECIF<br>ESTABLISHED BY AN EXISTING  | IC RU              | LE, OR THE A   | YLLOW.  | able e                                    | MISSION   |  |  | Oy                                      | ES                                      | S  | NO                                      |
| IF YES, COMPLETE AND ATTAC<br>EXCESS EMISSIONS DURING S  |                    |  |   |   | TO OPE  | ERAT                                   | EWITH                                      |   |   |  |   |
| 17) PROVIDE ANY LIMITATIONS OF<br>STANDARDS (E.G., ONLY ONE  |                    |  |   |   | NG EMIS   | SIO                                    | NS OR ANY V                                | /ORK                                    | PRAC                                    | TICE                                       |   |
| Monthly usage limitations for p  |                    |  |   | •   | oxide s   | shall                                  | not exceed                                 | 1 280                                   | 0 pou                                   | ınds ar                                    | nd                                      |
| 70,000 pounds respectively for   | rall e             | mission unit   | ts in V   | Villowl                                   | prook I.  |  |  |   |   |  |   |
|  |                    |  |   |   |   |  |  |   |   |  |   |
|  |                    |  |   |   |   |  |  |   |   |  |   |
|  |                    |  |   |   |   |  |  |   |   |  |   |
| OPERATING INFORMATION  |                    |  |   |   |   |  |  | 9500000000000000                        | 000000000000000000000000000000000000000 | u0000000000000000000000000000000000000     | *************************************** |
|  | *************      | ADEDATI  | 18//2 /8  |   |   | ······································ |  | 200000000000000000000000000000000000000 | ***********                             |  | *************************************** |
| 18) ATTACH THE CALCULATIONS,   | TO TH              | 000000000000000000000000000000000000000  | *************   |   | .0000000000000000000000   | 6660000000                             | LATEO, FRO                                 | <br>VVHI                                | CHT                                     |  |   |
| 18) ATTACH THE CALCULATIONS,<br>FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT   | RMATI              | E EXTENT TH<br>ION, MATERIA  | TEY AF<br>AL US/  | Œ AIR<br>NGE INI                          | EMISSIO<br>FORMAT   | N RE                                   | AND FUEL US                                | BAGE I                                  |   |  |   |
| FOLLOWING OPERATING INFO   | RMATI<br>220-1     | E EXTENT TH<br>ION, MATERIA  | HEY AF<br>AL US/<br>SPECI                               | Œ AIR<br>NGE INI                          | EMISSIO<br>FORMAT   | N RE<br>ION<br>ORA                     | AND FUEL US<br>I 202-CAAPP.                | SAGE                                    |   | WERE                                       | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT   | RMATI<br>220-1     | E EXTENT TO<br>ION, MATERIA<br>REFER TO  | HEY AF<br>AL US/<br>SPECI<br>Y:                         | Œ AIR<br>NGE INI                          | EMISSIO<br>FORMATI<br>ES OF F                                   | N RE<br>ION<br>ORA                     | AND FUEL US<br>I 202-CAAPP.                | SAGE                                    | DATA<br>KSMI                            | WERE                                       |   |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR  | RMAT<br>220-1<br>S | E EXTENT THO<br>ON, MATERIA<br>REFER TO<br>HOURS/DA  | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4                    | Œ AIR<br>NGE INI                          | EMISSIO<br>FORMATI<br>ES OF F                                   | N RE<br>ION<br>ORN<br>VEE              | AND FUEL US<br>I 202-CAAPP.<br>K:          | AGE I                                   | DATA<br>KSMI                            | were<br>Ear:<br>52                         |   |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year   | RMAT<br>220-1<br>S | E EXTENT THOM, MATERIA<br>REFER TO<br>HOURS/DA<br>2  | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4                    | Œ AIR<br>NGE INI                          | EMISSIO<br>FORMAT<br>ES OF F                                    | N RE<br>ION<br>ORN<br>VEE              | AND FUEL US<br>1 202-CAAPP.<br>K:<br>K:    | AGE I                                   | DATA<br>KS/YI                           | were<br>Ear:<br>52                         |   |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS   | RMAT<br>220-1<br>S | E EXTENT THE<br>ON, MATERIA<br>REFER TO<br>HOURS/DAY<br>2:<br>HOURS/DAY  | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:              | E AIR<br>IGE IN<br>AL NO                  | EMISSIO<br>FORMAT<br>ES OF F                                    | N RI<br>ION<br>ORA<br>VEE<br>7         | AND FUEL US<br>1 202-CAAPP.<br>K:<br>K:    | WEE                                     | DATA<br>KS/YI<br>KS/YI                  | were<br>Ear:<br>52<br>Ear:                 |   |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT<br>220-1<br>S | E EXTENT THOON, MATERIA<br>REFER TO<br>HOURS/DA<br>2<br>HOURS/DA<br>2  | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:              | E AIR<br>IGE IN<br>AL NO                  | EMISSIO<br>FORMAT<br>ES OF F<br>DAYS/V                          | N RI<br>ION<br>ORA<br>VEE<br>7         | AND FUEL US<br>I 202-CAAPP.<br>K:<br>K:    | WEE                                     | DATA<br>KS/YI<br>KS/YI                  | WERE<br>EAR:<br>52<br>EAR:<br>52           |   |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT<br>220-1<br>S | E EXTENT TO<br>ON, MATERIA<br>REFER TO<br>HOURS/DAY<br>2:<br>HOURS/DAY<br>24<br>DEC-FEB(%  | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:              | E AIR<br>IGE IN<br>AL NO                  | EMISSIO<br>FORMAT<br>ES OF F<br>DAYS/V<br>DAYS/V                | N RI<br>ION<br>ORA<br>VEE<br>7         | AND FUEL US I 202-CAAPP. K: K: JUN-AUG(?   | WEE                                     | DATA<br>KS/YI<br>KS/YI                  | WERE<br>EAR:<br>52<br>EAR:<br>52<br>P-NOV( | 7 <sub>9</sub> }:                       |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT<br>220-1      | E EXTENT TO<br>ON, MATERIA<br>REFER TO<br>HOURS/DAY<br>2:<br>HOURS/DAY<br>24<br>DEC-FEB(%  | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:<br>4         | E AIR<br>IGE IN<br>AL NO                  | EMISSIO<br>CORMAT<br>ES OF F<br>DAYS/V<br>DAYS/V<br>MAY(%):     | N REION (ORN                           | AND FUEL US I 202-CAAPP. K: JUN-AUG(*) 25  | WEE                                     | DATA<br>KS/YI<br>KS/YI                  | WERE<br>EAR:<br>52<br>EAR:<br>52<br>P-NOV( | 7.3                                     |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT<br>220-1      | E EXTENT THE CONTROL MATERIA PREFER TO PREFER  | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:<br>4         | E AIR<br>IGE IN<br>AL NO                  | EMISSIO<br>CORMAT<br>ES OF F<br>DAYS/V<br>DAYS/V<br>MAY(%):     | N REION (ORN                           | AND FUEL US I 202-CAAPP. K: JUN-AUG(*) 25  | WEE                                     | DATA<br>KS/YI<br>KS/YI                  | WERE<br>EAR:<br>52<br>EAR:<br>52<br>P-NOV( | y <sub>2</sub> },                       |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT<br>220-1      | E EXTENT THE CONTROL MATERIA PREFER TO PREFER  | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:<br>4<br>/SAG | E AIR<br>AGE IN<br>AL NOT<br>MAR<br>E INF | EMISSIO<br>CORMAT<br>ES OF F<br>DAYS/V<br>DAYS/V<br>MAY(%):     | N REION (ORN                           | AND FUEL US I 202-CAAPP. K:  JUN-AUG() 25  | WEE                                     | DATA<br>KS/YI<br>KS/YI<br>J SE          | WERE FAR: 52 FAR: 72 PANOV(                | **************************************  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT 220-1         | E EXTENT TI<br>ION, MATERIA<br>REFER TO<br>HOURS/DAY<br>24<br>HOURS/DAY<br>25<br>DEC-FEB/%<br>25   | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:<br>4<br>/SAG | E AIR<br>AGE IN<br>AL NOT<br>MAR<br>E INF | EMISSIO<br>CORMAT<br>ES OF F<br>DAYSA<br>DAYSA<br>MAY(%):<br>25 | N REION (ORN                           | AND FUEL US I 202-CAAPP. K:  JUN-AUG() 25  | WEE                                     | KS/YI                                   | WERE FAR: 52 FAR: 72 PANOV(                |   |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT  19a) MAXIMUM OPERATING HOUR  8760 per year  b) TYPICAL OPERATING HOURS  8600 per year  20) ANNUAL THROUGHPUT  | RMAT 220-1         | E EXTENT THE CONTROL MATERIA CONTROL MAXIMAL CONTROL C | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:<br>4<br>/SAG | E AIR<br>AL NOT<br>MAR<br>E INF           | EMISSIO<br>CORMAT<br>ES OF F<br>DAYSA<br>DAYSA<br>MAY(%):<br>25 | N REION (ORN                           | AND FUEL US 1 202-CAAPP.  K:  JUN-AUG(? 25 | WEE                                     | KS/YI                                   | WERE  FAR:  FAR:  FAR:  P-NOV(  25  ES     |   |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT  19a) MAXIMUM OPERATING HOUR 8760 per year b) TYPICAL OPERATING HOURS 8600 per year 20) ANNUAL THROUGHPUT  | RMAT 220-1         | E EXTENT THE CONTROL MATERIA CONTROL MAXIMAL CONTROL C | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:<br>4<br>/SAG | E AIR<br>AL NOT<br>MAR<br>E INF           | EMISSIO CORMAT ES OF F DAYSA  DAYSA  MAY(%): 25  ORMA  YEAR     | N REION (ORN                           | AND FUEL US 1 202-CAAPP.  K:  JUN-AUG(? 25 | WEE                                     | KS/YI                                   | WERE  FAR:  FAR:  FAR:  P-NOV(  25  ES     |   |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT  19a) MAXIMUM OPERATING HOUR 8760 per year  b) TYPICAL OPERATING HOURS 8600 per year  20) ANNUAL THROUGHPUT  21a) RAW MATERIALS  Ethylene Oxide  | RMAT 220-1         | E EXTENT THE CONTROL MATERIA CONTROL MAXIMAL CONTROL C | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:<br>4<br>/SAG | E AIR<br>AL NOT<br>MAR<br>E INF           | EMISSIO FORMAT ES OF F DAYS/V DAYS/V 25 ORMA1 /EAR 420          | N REION (ORN                           | AND FUEL US 1 202-CAAPP.  K:  JUN-AUG(? 25 | WEE                                     | KS/YI                                   | WERE  FAR:  FAR:  FAR:  P-NOV(  25  ES     |   |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT  19a) MAXIMUM OPERATING HOUR 8760 per year  b) TYPICAL OPERATING HOURS 8600 per year  20) ANNUAL THROUGHPUT  21a) RAW MATERIALS  Ethylene Oxide  | RMAT 220-1         | E EXTENT THE CONTROL MATERIA CONTROL MAXIMAL CONTROL C | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:<br>4<br>/SAG | E AIR<br>AL NOT<br>MAR<br>E INF           | EMISSIO FORMAT ES OF F DAYS/V DAYS/V 25 ORMA1 /EAR 420          | N REION (ORN                           | AND FUEL US 1 202-CAAPP.  K:  JUN-AUG(? 25 | WEE                                     | KS/YI                                   | WERE  FAR:  FAR:  FAR:  P-NOV(  25  ES     |   |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT  19a) MAXIMUM OPERATING HOUR 8760 per year b) TYPICAL OPERATING HOURS 8600 per year 20) ANNUAL THROUGHPUT  21a) RAW MATERIALS  Ethylene Oxide  | RMAT 220-1         | E EXTENT THE CONTROL MATERIA CONTROL MAXIMAL CONTROL C | HEY AF<br>AL US/<br>SPECI<br>Y:<br>4<br>Y:<br>4<br>/SAG | E AIR<br>AL NOT<br>MAR<br>E INF           | EMISSIO FORMAT ES OF F DAYS/V DAYS/V 25 ORMA1 /EAR 420          | N REION (ORN                           | AND FUEL US 1 202-CAAPP.  K:  JUN-AUG(? 25 | WEE                                     | KS/YI                                   | WERE  FAR:  FAR:  FAR:  P-NOV(  25  ES     |   |

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|   |   | MAXIMUM R.                              | ATES                                    | TYPICA                                  | L RATES                                 |  |
|---|---|---|---|---|---|--|
| 21b) PRODUCTS                                 | b) PRODUCTS LBS/HR                      |   | TONS/YEAR                               | LBS/HR                                  | TONS/YEAR                               |  |
| N/A   | <sub>WA</sub>                           |   |   | *************************************** |   |  |
| ······································        | <b></b>                                 |   |   |   | 000/5000000000000000000000000000000000  |  |
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|   |   | MAXIMUM R/                              | ATES                                    | TYPICA                                  | L RATES                                 |  |
| 21c) BY-PRODUCT MATERIALS                     | **********                              | LBS/HR                                  | TONS/YEAR                               | LBS/HR                                  | TONS/YEAR                               |  |
| N/A   |   |   | *************************************** |   | *************************************** |  |
|   |   |   |   |   |   |  |
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|   |   | \$10' g g god g _ g g gro               | 2 10 20 50 B B                          |   |   |  |
| 22a) MAXIMUM FIRING RATE                      | 000000000000000000000000000000000000000 | FVEL VO:<br>  b) TYPICAL FIRIN          | A <i>GE DATA</i><br>G RATE              | c) DESIGN CAPACI                        | TY FIRING                               |  |
| (MILLION BTU/HR):                             |   | (MILLION BTU/                           | HR):                                    | RATE (MILLION                           | BTU/HR):                                |  |
| N/A   |   | N//                                     | À                                       | N/A                                     |   |  |
| d) FUEL TYPE:                                 | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  | <u>\$</u>                               |   |   |   |  |
| Onatural gas Ofu                              | EL OII                                  | L: GRADE NUMBER                         | $O_{ci}$                                | OAL OOTHER                              |   |  |
| IF MORE THAN ONE FUEL IS                      |   |   |   |   |   |  |
| e) TYPICAL HEAT CONTENT OF                    |   | MANAMAA                                 | AQAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA  | UR CONTENT (WT %.                       | NA FOR NATI IPAI                        |  |
| BTU/GAL OR BTU/SCF):                          | 0 10/10/10                              | S S S S R S S S S S S S S S S S S S S S | GAS):                                   | ~ · · · · · · · · · · · · · · · · · · · | 2 COLON PROPERTIES COLON                |  |
|   |   |   | •                                       |   |   |  |
| g) TYPICAL ASH CONTENT (WT %., NA FOR NATURAL |   |   | h) ANNUAL FUE                           | L USAGE (SPECIFY U                      | NITS, E.G.,                             |  |
| GAS):   |   |   | SCFYEAR, G                              | AL/YEAR, TON/YEAR)                      | :                                       |  |
| 23) ARE COMBUSTION EMISSION                   | ie ni                                   | CTEN TO THE CAN                         | L<br>C etack od com                     |   |   |  |
| PROCESS UNIT EMISSIONS?                       |   | OIED IO INC DAM                         | E SINCK ON CONE                         | wr D                                    | YES UNO                                 |  |
| IF NO, IDENTIFY THE EXHAUS                    | ST PO                                   | INT FOR COMBUST                         | TON EMISSIONS:                          |   |   |  |
|   |   |   |   |   |   |  |
|   |   |   |   |   |   |  |
|   |   |   |   |   |   |  |
|   | Samonaca                                |   |   |   |   |  |

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|  | APPLICABLE RI  | <i>ILES</i>  |
|--|--|--|
| 24) PROVIDE ANY SPECIFIC EMISSION STANDARD<br>REGULATED AIR POLLUTANT(S)   | (S) AND LIMITATION(S) SET BY RULE(S) WHICH A<br>EMISSION STANDARD(S)         | RE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.204(j)(4), 3.5 LBS/GAL) REQUIREMENT(S) |
| VOM (WB1 Scrubber 2)   | 35 IAC 218.302(b)  | At least 85% recovery of total uncontrolled org. mat.  |
| HAP (WB1 Scrubber 2)   | 40CFR 63.362   | 99% reduction or 1 ppm outlet  |
| 25) PROVIDE ANY SPECIFIC RECORDICEPING RUI<br>REGULATED AIR POLLUTANT(S)   | LE(S) WHICH ARE APPLICABLE TO THIS EMISSION RECORDSEEPING RULE(S)            | N UNIT:  REQUIREMENT(S)  |
| Standards don't apply to backvent but do apply to WB1 Scrubber 2   | 40 CFR 63.10   | MACT recordkeeping and reporting   |
| 8) PROVIDE ANY SPECIFIC REPORTING RULE(S) I REGULATED AIR POLLUTANT(S)  Standards don't apply to backvent but do apply to W81 Scrubber 2 | WHICH ARE APPLICABLE TO THIS EMISSION UNIT<br>REPORTING RULE(S) 40 CFR 63.10 | T.  REQUIREMENT(5)  MACT recordkeeping and reporting   |
|  |  |  |
| 7) PROVIDE ANY SPECIFIC MONITORING RULE(S)<br>REGULATED AIR POLLUTANT(S)   | WHICH ARE APPLICABLE TO THIS EMISSION UN<br>MONITORING RULE(S)               | IT:  REQUIREMENT(S)  |
| HAP monitoring applies to  | 40CFR 63.364   | Weekly Scrubber liquor level   |
| W81 Scrubber 2 and dry beds  | 40CFR 63.364   | Weekly EO concentration from dry beds  |
| 8) PROVIDE ANY SPECIFIC TESTING RULES AND/<br>REGULATED AIR POLLUTANT(S)   | OR PROCEDURES WHICH ARE APPLICABLE TO 1 TESTING RULE(S)                      | THIS EMISSION UNIT :  REQUIREMENT(S)   |
| HAP applies to WB1 Scrubber 2  | 40 CFR63.365   | Testing of control equipment   |
|  |  |  |

| <b>)</b>  |   | SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS  | *************************************** | 88800008888888888888888888888888888888  |  |  |  |  |  |
|---|---|---|---|---|--|--|--|--|--|
| 29) DOES THE EMISSION UNIT QUA<br>OTHERWISE APPLICABLE RULE   |   | TON FROM AN                             | O YES                                   | <b>8</b> NO                             |  |  |  |  |  |
| IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 220-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION. |   |   |   |   |  |  |  |  |  |
|   |   |   |   | *************************************** |  |  |  |  |  |
|   | 000000000000000000000000000000000000000 | E INFORMATION                           |   |   |  |  |  |  |  |
| 30) IS THE EMISSION UNIT IN COMF<br>REQUIREMENTS?   | 'LIANCE WITH ALL AP                     | PLICABLE                                | Ø yes                                   | U NO                                    |  |  |  |  |  |
| IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.  |   |   |   |   |  |  |  |  |  |
| 31) EXPLANATION OF HOW INITIAL  | COMPLIANCE IS TO B                      | E, OR WAS PREVIOUSLY, DE                | MONSTRATED                              | ·                                       |  |  |  |  |  |
| Ethylene Oxide and Propylene  | oxide usage is tra                      | cked monthly.                           |   |   |  |  |  |  |  |
| WB Scrubber 2 was tested Jai  | nuary 23, 2003                          |   |   |   |  |  |  |  |  |
|   |   |   |   |   |  |  |  |  |  |
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| 32) EXPLANATION OF HOW ONGOIN   | IG COMPLIANCE WILI                      | L BE DEMONSTRATED:                      | 000000000000000000000000000000000000000 | 9099999999                              |  |  |  |  |  |
| Records of Ethylene Oxide (E0   | D) and Propylene C                      | )xide (PO) usage. (month                | lv)                                     |   |  |  |  |  |  |
| WB1 Scrubber 2 is required to   |   | . ,                                     | • •                                     |   |  |  |  |  |  |
| EO concentration is checked w   |   | * *                                     | •                                       |   |  |  |  |  |  |
|   | •                                       |   | ·                                       |   |  |  |  |  |  |
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| TESTING MONITORING BECORNVEEDING AND DEDOPTING  |   |   |   |   |  |  |  |  |  |
| TESTING, MONITORING, RECORDKEEPING AND REPORTING  33a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO   |   |   |   |   |  |  |  |  |  |
| DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE  METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):   |   |   |   |   |  |  |  |  |  |
| METHOD OF MEASUREMENT, A  | AND THE PREQUENCY                       | r or soum RECORDS (E.G., I              | TUUKLY, DAILY                           | , vveeKLY):                             |  |  |  |  |  |
| PARAMETER UNIT (  | OF MEASUREMENT                          | METHOD OF MEASUREMENT                   | ### ### ##############################  | EQUENCY                                 |  |  |  |  |  |
| Sterilant Usage pou   | *************************************** | Operating data                          | monthl                                  | *************************************** |  |  |  |  |  |
| Liquor level inch   | es                                      | Operating data                          | weekly                                  |   |  |  |  |  |  |
| EO conc ppm   | }                                       | GLC from dry bed                        | weekly                                  |   |  |  |  |  |  |
|   | *************************************** | *************************************** |   | 99.1                                    |  |  |  |  |  |
|   | *************************************** |   |   |   |  |  |  |  |  |
|   |   | 1                                       | 3 8                                     | 1 8                                     |  |  |  |  |  |

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| RECORDED PARAMET                                     | TER INCLUDE THE METHOD                          | ORDS WILL BE CREATED AND NO<br>OF RECORDKEEPING, TITLE OF I | PERSON RESPONSIBLE FOR                 |
|--|---|---|--|
| PARAMETER  | METHOD OF<br>RECORDKEEPING                      | TITLE OF PERSON RESPONSIBLE                                 | TITLE OF<br>CONTACT PERSON             |
| Sterilant usage                                      | Operating report                                | General Manager   | EH&S                                   |
| Liquor Level   | PM records                                      | General Manager   | EH&S                                   |
| EO conc  | PM Records                                      | General Manager   | EH&S                                   |
|  | ***************************************         | ***************************************                     |  |
|  |   |   |  |
|  | l   |   |  |
| o) IS COMPLIANCE OF THE<br>THE RECORDS?              | EMISSION UNIT READILY O                         | EMONSTRATED BY REVIEW OF                                    | X YES ONO                              |
| IF NO, EXPLAIN:                                      |   |   |  |
| ir 190, earlain:                                     |   |   |  |
|  |   |   |  |
|  |   |   |  |
|  |   |   |  |
| ~~~~~~~~~~   | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~         |   |  |
| d) ARE ALL RECORDS REA<br>SUBMITTAL TO THE AGI       | IDILY AVAILABLE FOR INSPE<br>ENCY UPON REQUEST? | CTION, COPYING AND  | Ø yes O no                             |
| IF NO. EXPLAIN:                                      |   |   |  |
| 7. 7. 7. 40. 7. 400. 7. 400. 7. 7.                   |   |   |  |
|  |   |   |  |
|  |   |   |  |
|  |   |   |  |
| **************************************               | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~          |   | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |
| COMPLIANCE:  | UKS UK MUNITUKING ACIN                          | /ITIES USED TO DETERMINE FEE                                | 5, KULE APPLICABILITY OR               |
|  | evel of the scrubber liquo                      |   |  |
| Monitor the EtO concent                              | tration entering and exitin                     | g the AATDry Beds.  |  |
|  |   |   |  |
| ***************************************              | ······································          |   |  |
| · ·  |   | E.G., VOM EMISSIONS TO ATMOS                                | SPHERE)7                               |
| Level of scrubber liquor.<br>EtO levels from the AAT |   |   |  |
| Cio isasip non nis wa                                | Dry Deus.                                       |   |  |
|  |   |   |  |
|  |   |   |  |
| c) DESCRIBE THE LOCATION                             | ON OF EACH MONITOR (E.G.                        | IN STACK MONITOR 3 FEET FRO                                 | OM EXIT):                              |
|  |   |   |  |
|  |   |   |  |
|  |   |   |  |
|  |   |   |  |

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| 34d) IS EACH MONITOR EQUIPPED V                                | VITH A RECORDING DEVICE?               | *************************************** | O ves                                   | O NO                                    |
|--|--|---|---|---|
| IF NO, LIST ALL MONITORS WITHO                                 | UT A RECORDING DEVICE:                 |   | 1000000                                 | 3000000 7 1 100                         |
| Records are kept manually                                      |  |   |   |   |
|  |  |   |   |   |
|  |  |   |   |   |
|  |  |   |   |   |
| e) IS EACH MONITOR REVIEWED FOR<br>BASIS?                      | ACCURACY ON AT LEAST A O               | UARTERLY                                | O YES                                   | O NO                                    |
| IF NO. EXPLAIN:  |  |   |   |   |
| N/A  |  |   |   |   |
|  |  |   |   |   |
|  |  |   |   |   |
|  |  |   |   |   |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~                        | BBDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD |   | 20                                      | ······                                  |
| (1) IS EACH MONITOR OPERATED AT A     IN OPERATION?            | ALL TIMES THE ASSOCIATED E             | MISSION UN                              | IT IS O YES                             | <b>8</b> %0                             |
| IF NO, EXPLAIN:  |  |   |   |   |
| No continuous monitoring is requi                              | ired.                                  |   |   |   |
|  |  |   |   |   |
|  |  |   |   |   |
|  |  |   |   |   |
| 35) PROVIDE INFORMATION ON THE M                               | OST RECENT TESTS, IF ANY, II           | N WHICH TH                              | E RESULTS ARE USE                       | D FOR                                   |
| PURPOSES OF THE DETERMINATION DATE, TEST METHOD USED, TESTI    | ON OF FEES, RULE APPLICABIL            | JTY OR COM                              | IPLIANCE. INCLUDE                       | THE TEST                                |
| SUMMARY OF RESULTS. IF ADDIT                                   |  |   |   |   |
| TEST DATE TEST METHOD  | TESTING COMPANY                        | OPERATING<br>CONDITION                  |   | OF RESULTS                              |
| 1/21/03  | Kremer Env.                            | Normal                                  | > 99% eff                               |   |
|  |  | 000000000000000000000000000000000000000 | ••••••                                  |   |
|  |  |   |   |   |
| , , , , , , , , , , , , , , , , , , ,                          |  | *************************************** |   |   |
|  |  | <b>~~~</b>                              |   | *************************************** |
| 36) DESCRIBE ALL REPORTING REQUIL<br>SUBMITTALS TO THE AGENCY: | REMENTS AND PROVIDE THE 1              | ITLE AND FI                             | REQUENCY OF REPO                        | PRT                                     |
| REPORTING REQUIREMENTS   | TITLE OF REPORT                        |   | FREQUENC                                | Y                                       |
| Annual emissions report  | Annual emissions repo                  | rt I                                    | annual (per Title V                     | ~~~                                     |
| Excess emissions   | Excess emissions                       |   | semi-annual                             |   |
|  |  |   | 000000000000000000000000000000000000000 |   |
| ***************************************                        | £                                      |   | 888800000000000000000000000000000000000 | ~~~~~~                                  |

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|                             | *************************************** |   |                               | *************************************** | (37)                        | EMISSION     | INFORMATION               |                         |                               |              |                               |
|-----------------------------|---|---|-------------------------------|---|-----------------------------|--------------|---------------------------|-------------------------|-------------------------------|--------------|-------------------------------|
|                             |   | O 'actual emission rate O 'uncontrolled emission rate |                               |   |                             | VITOMVBIE B. | Y RULE EMISS              | PERMITTED EMISSION RATE |                               |              |                               |
| REGULATED AIR<br>POLLUTANT  |   | LBS PER<br>HOUR<br>(LBS/HR)                           | TONS PER<br>YEAR<br>(TONS/YR) | <sup>3</sup> OTHER<br>TERMS             | <sup>3</sup> OTHER<br>TERMS | 40%          | <sup>6</sup> RATE (UNITS) | APPLICABLE<br>RULES     | TONS PER<br>YEAR<br>(TONS/YR) | RATE (UNITS) | TONS PER<br>YEAR<br>(TONS/YR) |
| CARBON                      | MAXIMUM:                                |   |                               |   |                             |              |                           |                         |                               |              |                               |
| MONOXIDE (CO)               | TYPICAL                                 |   |                               |   |                             |              |                           |                         |                               |              |                               |
| LEAD                        | MAXIMUM                                 |   |                               |   |                             |              |                           |                         |                               |              |                               |
|                             | TYPICAL:                                |   |                               |   |                             |              | ( )                       |                         |                               |              |                               |
| NITROGEN                    | MAXIMUM:                                |   |                               |   |                             |              | ( )                       |                         |                               |              |                               |
| OXIDES (NOx)                | TYPICAL                                 |   |                               |   |                             |              | ( )                       |                         |                               |              |                               |
| PARTICULATE                 | MAXIMUM:                                |   |                               |   |                             |              | ( )                       |                         |                               |              |                               |
| MATTER (PART)               | TYPICAL:                                |   | 9                             |   |                             |              |                           |                         |                               |              |                               |
| PARTICULATE<br>MATTER <= 10 | Maximum:                                |   |                               |   |                             |              | ( )                       |                         |                               |              |                               |
| MICROMETERS<br>(PM10)       | TYPICAL                                 |   |                               |   |                             |              | ( )                       |                         |                               |              |                               |
| SULFUR                      | MAXIMUM:                                |   |                               |   |                             |              | ( )                       |                         |                               |              |                               |
| DIOXIDE (\$02)              | TYPICAL:                                |   |                               |   |                             |              | ( )                       |                         |                               |              |                               |
| VOLATILE<br>ORGANIC         | MAXIMUM:                                | see Ex  |                               |   |                             |              | ( )                       |                         |                               |              |                               |
| MATERIAL (VOM)              | TYPICAL:                                | 220-8   |                               |   |                             |              | ( )                       |                         |                               |              |                               |
| OTHER,<br>Specify:          | MAXIMUM:                                | See Ex.   |                               |   |                             |              | ( )                       |                         |                               |              |                               |
|                             | TYPICAL                                 | 220-8   |                               |   |                             |              |                           |                         |                               |              |                               |
| EXAMPLE:<br>PARTICULATE     | MAXIMUM:                                | 5.00  | 21,9                          | 0.3<br>GR/DSCF                          |                             | 1            | 6.0 (LBS/HR)              | 212.321                 | 76.28                         | 5.5 LBS/HR   | 22                            |
| MATTER                      | TYPICAL                                 | 4.00  | 14.4                          | 0.24<br>GR/DSCF                         |                             | 4            | 5.5 (LBS/HR)              | 212.321                 | 19.80                         |              |                               |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS. PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.
PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GRODSCF, ETC.)

DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS) SPATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

|                        |                            | (3:                  | 8) HAZARDOUS                   | AIR POLLUTAN                      | IT EMISSION I               | NFORMATIC | N .  |  |
|------------------------|----------------------------|----------------------|--------------------------------|-----------------------------------|-----------------------------|-----------|--|--|
| 98999                  |                            | 98888                | O 1ACTU<br>O 1UNCO             | IAL EMISSION RA<br>ONTROLLED EMIS | ALLOWABLE BY RULE           |           |  |  |
| NAME OF HAP<br>EMITTED | <sup>2</sup> CAS<br>NUMBER |                      | POUNDS PER<br>HOUR<br>(LBS/HR) | TONS PER<br>YEAR<br>(TONS/YR)     | <sup>3</sup> OTHER<br>TERMS | 40м       | <sup>5</sup> RATE OR STANDARD APPLICABLE RULE                      |  |
| Ethylene Oxide         | 75-21-8                    | MAXIMUM:<br>TYPICAL: | See Exhibit                    | 220-A & B                         |                             |           |  |  |
| Propylene Oxide        | 75-56-9                    | MAXIMUM:<br>TYPICAL: | See Exhibit                    | 220-A & B                         |                             |           |  |  |
|                        |                            | MAXIMUM:<br>TYPYCAL: |                                |                                   |                             |           |  |  |
|                        |                            | MAXIMUM:<br>TYPICAL: |                                |                                   |                             |           |  |  |
|                        |                            | MAXIMUM:<br>TYPICAL: |                                |                                   |                             |           |  |  |
|                        |                            | MAXIMUM:<br>TYPICAL: |                                |                                   |                             |           |  |  |
|                        |                            | MAXIMUM:<br>TYPICAL: |                                |                                   |                             |           |  |  |
|                        |                            | MAXIMUM:<br>TYPICAL: |                                |                                   |                             |           |  |  |
| EXAMPLE:<br>Benzene    | 71432                      | MAXIMUM:<br>TYPICAL: | 10.0<br>8.0                    | 7.2<br>0.8                        |                             | 2         | 98% by wt control device CFR 61<br>leak-light trucks 61.302(b),(d) |  |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL, AS EXHIBIT 220-6.

PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY. <sup>2</sup>CAS - CHEMICAL ABSTRACT SERVICE NUMBER.

PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).

\*DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).

\*RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

| EXHAUST POINT INFORMATION  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
| THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT. |  |  |  |  |  |  |  |  |
|  | 39) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT: |  |  |  |  |  |  |  |
| WB1 Scrubber #2 with dry bed   |  |  |  |  |  |  |  |  |
| 40) DESCRIPTION OF EXHAUST POINT I<br>DISCHARGES INDOORS, DO NOT C                                       |  |  | RS, ETC.) IF THE EXHAUST POINT           |  |  |  |  |  |
| Outside Stack  |  |  |  |  |  |  |  |  |
| 41) DISTANCE TO NEAREST PLANT BOI  | INDARY FROM EX                                 | HAUST POINT DISCH                      | ARGE (FT):                               |  |  |  |  |  |
| approx 20 feet   |  |  |  |  |  |  |  |  |
| 42) DISCHARGE HEIGHT ABOVE GRADI   | : (FT):  | ······································ |  |  |  |  |  |  |
| approx 30 feet   |  |  |  |  |  |  |  |  |
| 43) GOOD ENGINEERING PRACTICE (G   | EP) HEIGHT, IF KN                              | OWN (FT):                              |  |  |  |  |  |  |
| Unknown  |  |  |  |  |  |  |  |  |
| 44) DIAMETER OF EXHAUST POINT (FT)<br>1.128 TIMES THE SQUARE ROOT OF                                     | r marc year to procure to                      | ON CIRCULAR EXHAL<br>inches            | IST POINT, THE DIAMETER IS               |  |  |  |  |  |
| 45) EXIT GAS FLOW RATE   | a) MAXIMUM (AC                                 | FM):                                   | b) TYPICAL (ACFM):                       |  |  |  |  |  |
|  | **   | 5,500                                  | 15,500                                   |  |  |  |  |  |
| 46) EXIT GAS TEMPERATURE   | a) MAXIMUM (°F)                                |  | b) TYPICAL (*F):                         |  |  |  |  |  |
|  | apţ  | жох 75                                 | approx 75                                |  |  |  |  |  |
| 47) DIRECTION OF EXHAUST (VERTICA<br>Vertical  | , LATERAL, DOWI                                | (WARD):                                |  |  |  |  |  |  |
| 48) LIST ALL EMISSION UNITS AND CON  | TOAL MOLLATOR                                  | concrov the ever                       | STREET ENDARFE.                          |  |  |  |  |  |
| and the transfer and a view and a and  | erings, was erested as                         |  |  |  |  |  |  |  |
| NAME   |  | fLO                                    | W DIAGRAM DESIGNATION                    |  |  |  |  |  |
| <sup>a)</sup> Aeration Rooms (current)   |  | AR                                     |  |  |  |  |  |  |
| b) Sterilizer Backvent SC1, SC2  | . SC3, SC4                                     | Backvent                               |  |  |  |  |  |  |
| c) Backup for Sterlizer Chamber  | s SC1-4  | vacuum pump                            |  |  |  |  |  |  |
| d)   | ***************************************        | •                                      |  |  |  |  |  |  |
| e)   |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| THE FOLLOWING INFORMATION NEED ONLY  | BE SUPPLIED IF REAL                            | DILY AVAILABLE.    b) LONGITUDE:       |  |  |  |  |  |  |
| 49a) LATITUDE:   |  | fythminnt:                             |  |  |  |  |  |  |
| 50) UTM ZONE:  | b) UTM VERTICA                                 | l (KSA)                                | c) UTM HORIZONTAL (KM):                  |  |  |  |  |  |
| was a con massam.  | ery out the rest of the sea                    | en de seu l'                           | wy w vers e swe how were a com federals. |  |  |  |  |  |

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#### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL - PERMIT SECTION P.O. BOX 19506 SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE Revision #: Date: \_\_\_\_\_/ \_\_ of Source Designation:

#### FOR AGENCY USE ONLY ID NUMBER: PROCESS EMISSION UNIT EMISSION POINT #: DATA AND INFORMATION DATE

| SOURCE INFORMATION                    |   |  |  |  |  |  |  |  |
|---------------------------------------|---|--|--|--|--|--|--|--|
| 1) SOURCE NAME:                       |   |  |  |  |  |  |  |  |
| Sterigenics US, LLC                   |   |  |  |  |  |  |  |  |
| 2) DATE FORM<br>PREPARED: 30 May 2018 | 3) SOURCE ID NO.<br>(IF KNOWN): 043110AAC |  |  |  |  |  |  |  |

| GENERAL INFORMATION   |   |  |  |  |  |  |
|---|---|--|--|--|--|--|
| 4) NAME OF EMISSION UNIT: (6) Ethylene Oxide/Propylene oxide Sterilization Chambers (13 pallet capacity) SC-2 |   |  |  |  |  |  |
| 5) NAME OF PROCESS:   |   |  |  |  |  |  |
| Sterilization of medical products and spices  |   |  |  |  |  |  |
| 6) DESCRIPTION OF PROCESS:  |   |  |  |  |  |  |
| Chemical Sterilization  |   |  |  |  |  |  |
| 7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR A  | CTIVITY ACCOMPLISHED:                   |  |  |  |  |  |
| Sterilized Medical Supplies and Treated Spices  |   |  |  |  |  |  |
| 8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT:   |   |  |  |  |  |  |
| Sterilizer Chambers   |   |  |  |  |  |  |
| 9) MANUFACTURER OF EMISSION UNIT (IF KNOWN):  |   |  |  |  |  |  |
| Unknown   |   |  |  |  |  |  |
| 10) MODEL NUMBER (IF KNOWN):  | 11) SERIAL NUMBER (IF KNOWN):           |  |  |  |  |  |
| unknown   | unknown                                 |  |  |  |  |  |
| 12) DATES OF COMMENCING CONSTRUCTION,   | a) CONSTRUCTION (MONTH/YEAR):           |  |  |  |  |  |
| OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED)                           | June 1984                               |  |  |  |  |  |
| •   | b) OPERATION (MONTH/YEAR):              |  |  |  |  |  |
|   | May 1985                                |  |  |  |  |  |
|   | c) LATEST MODIFICATION (MONTH/YEAR):    |  |  |  |  |  |
|   | November 1990                           |  |  |  |  |  |
| 43) DECOMOTION OF MODIFICATION HE ADDITION FOR  | 999999999999999999999999999999999999999 |  |  |  |  |  |

DESCRIPTION OF MODIFICATION (IF APPLICABLE):

The sterilization chambers includes the chamber vent (via vacuum pump) and the chamber exhaust vent (backvent) as one emission unit. The chamber exhaust vent currently exhausts uncontrolled to atmosphere. This modification proposes to control the backvent with scrubber #2 and dry bed reactor.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

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FOR APPLICANT'S USE

| იქველები დელი და ინი გელი და და განადა და  |                    | ***************************************  | ~~~~~  | G000000000000000000000000000000000   |   | 000000000000000000000000000000000000000 |  |  |  |
|---|--------------------|--|--|--|---|---|--|--|--|
| 14) DOES THE EMISSION UNIT HA   | VE MO              | RE THAN ONE I  | MODE OF (  | PERATION'  | ?   | Ø yes                                   | 5 O NO   |  |  |
| IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE:<br>A SEPARATE PROCESS EMISSION UNIT FORM 220-CAAPP MUST BE COMPLETED<br>FOR EACH MODE):                  |                    |  |  |  |   |   |  |  |  |
| The sterilization chambers inc  | ludes              | the chamber  | vent (via  | vacuum pu  | ımp) and the  | chamb                                   | er exhaust   |  |  |
| vent (backvent) as one emissi   | on un              | it. The chamt  | oer backv  | ent modific  | cation is cov   | ered by                                 | this form. The                                     |  |  |
| chamber vent is controlled by   | W81.               | Acid Scrubbei  | r 1 and re   | mains unc  | hanged.   |   |  |  |  |
| 15) PROVIDE THE NAME AND DES<br>EMISSION UNIT, IF APPLICABL<br>MUST BE COMPLETED FOR EA   | E (FOR             | NM 260-CAAPP A   | ND THE A   | PPROPRIAT  | E 260-CAAPP /   |   |  |  |  |
| The chamber backvent is cum   | ently ı            | uncontrolled.  | This appi  | ication pro  | poses to du   | at the cl                               | ramber   |  |  |
| exhaust vent (backvent) to the  | exist              | ing Acid Scrul   | bber (scri   | ibber#2) v   | vith Dry Bed  | Reacto                                  | r. The   |  |  |
| information provided below is   | requir             | ed for the exis  | sting cont   | rol device.  |   |   |  |  |  |
| 16) WILL EMISSIONS DURING STA<br>RATE PURSUANT TO A SPECIF<br>ESTABLISHED BY AN EXISTING  | FIC RU<br>S OR P   | LE, OR THE ALL<br>ROPOSED PER  | OWABLE I<br>MIT COND                                 | MISSION LI<br>ITION?   | MIT AS  | O yes                                   | s Ø no   |  |  |
| IF YES, COMPLETE AND ATTA<br>EXCESS EMISSIONS DURING S  |                    |  |  | I IU UPEKA   | HE WILL   |   |  |  |  |
| 17) PROVIDE ANY LIMITATIONS OF<br>STANDARDS (E.G., ONLY ONE   |                    |  |  | NG EMISSIC   | ONS OR ANY V  | VORK PR                                 | ACTICE   |  |  |
| Monthly usage limitations for p   | ropyle             | ene oxide <mark>a</mark> nd  | ethylene   | oxide sha  | II not exceed   | i 2800 j                                | oounds and   |  |  |
| 70,000 pounds respectively fo   | r all ei           | mission units  | in Willowl   | prook 1.   |   |   |  |  |  |
|   |                    |  |  |  |   |   |  |  |  |
|   |                    |  |  |  |   |   |  |  |  |
|   | **********         | ·  | *******************************                      | 666toooooooooooooooooooooooooooooooooo   |   | 40000000000000000000000000000000000000  | ***************************************            |  |  |
|   | ×(0000000000000    | 00000000000000000000000000000000000000   | *******  | p==0,0000000000000000000000000000000000  |   | *************************************** |  |  |  |
|   |                    | OPERATIN   | g <i>INFOR</i> i                                     | MATION   |   | *************************************** |  |  |  |
| 18) ATTACH THE CALCULATIONS.<br>FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT  | RMAT               | ION, MATERIAL  | Y ARE AIR<br>USAGE IN                                | EMISSION R<br>FORMATION  | I AND FUEL US   | SAGE DA                                 |  |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT  | RMAT<br>220-1      | E EXTENT THE<br>ION, MATERIAL<br>REFER TO SP   | Y ARE AIR<br>USAGE IN                                | EMISSION P<br>FORMATION<br>(ES OF FOR  | I AND FUEL US<br>M 202-CAAPP.                                     | SAGE DA                                 | TA WERE  |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR   | RMAT<br>220-1      | E EXTENT THE<br>ION, MATERIAL  | Y ARE AIR<br>USAGE IN                                | EMISSION R<br>FORMATION  | I AND FUEL US<br>M 202-CAAPP.                                     | SAGE DA                                 |  |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year  | RMAT<br>220-1<br>S | E EXTENT THE<br>ION, MATERIAL<br>REFER TO SP<br>HOURS/DAY:   | Y ARE AIR<br>USAGE IN                                | EMISSION P<br>FORMATION<br>(ES OF FOR  | I AND FUEL US<br>M 202-CAAPP.<br>EK:                              | AGE DA                                  | TA WERE  |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS  | RMAT<br>220-1<br>S | E EXTENT THE<br>ION, MATERIAL<br>REFER TO SP<br>HOURS/DAY<br>24                                    | Y ARE AIR<br>USAGE IN                                | EMISSION R<br>FORMATION<br>ES OF FOR<br>DAYS/WEI<br>DAYS/WEI   | I AND FUEL US<br>M 202-CAAPP.<br>EK:                              | AGE DA                                  | TA WERE<br>SYYEAR:<br>52                           |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year  | RMAT<br>220-1<br>S | E EXTENT THE<br>ION, MATERIAL<br>REFER TO SP<br>HOURS/DAY:<br>24<br>HOURS/DAY:                     | Y ARE AIR<br>USAGE IN<br>ECIAL NO                    | EMISSION R<br>FORMATION<br>ES OF FOR<br>DAYS/WEI<br>DAYS/WEI   | I AND FUEL US<br>M 202-CAAPP.<br>EK.<br>7                         | SAGE DA                                 | TA WERE  5/YEAR:  52  5/YEAR:  52  5/YEAR:         |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS  | RMAT<br>220-1<br>S | E EXTENT THE<br>ION, MATERIAL<br>REFER TO SP<br>HOURS/DAY<br>24<br>HOURS/DAY<br>24                 | Y ARE AIR<br>USAGE IN<br>ECIAL NO                    | EMISSION R<br>FORMATION<br>(ES OF FOR<br>DAYS/WEI<br>DAYS/WEI  | I AND FUEL US<br>M 202-CAAPP.<br>EK:<br>7                         | SAGE DA                                 | TA WERE  5/YEAR:  52  5/YEAR:                      |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS  | RMAT<br>220-1<br>S | E EXTENT THE<br>ON, MATERIAL<br>REFER TO SP<br>HOURS/DAY:<br>24<br>HOURS/DAY:<br>24<br>DEC-FEB(%). | Y ARE AIR<br>USAGE IN<br>ECIAL NO                    | EMISSION R<br>FORMATION<br>(ES OF FOR<br>DAYS/WEE<br>DAYS/WEE<br>MAY(%):   | I AND FUEL US<br>M 202-CAAPP.<br>EK:<br>7<br>JUN-AUG(9            | SAGE DA                                 | TA WERE  5/YEAR:  52  5/YEAR:  52  SEP-NOV(%):     |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS  | PRMAT 220-1        | E EXTENT THE<br>ON, MATERIAL<br>REFER TO SP<br>HOURS/DAY:<br>24<br>HOURS/DAY:<br>24<br>DEC-FEB(%). | Y ARE AIR<br>USAGE IN<br>ECIAL NOT                   | EMISSION P<br>FORMATION<br>(ES OF FOR<br>DAYS/WEI<br>MAY(%):<br>25   | I AND FUEL US<br>M 202-CAAPP.<br>7<br>EK:<br>7<br>JUN-AUG(9<br>25 | SAGE DA                                 | TA WERE  5/YEAR:  52  5/YEAR:  52  SEP-NOV(%):     |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS  | PRMAT 220-1        | E EXTENT THE ION, MATERIAL REFER TO SP HOURS/DAY: 24 HOURS/DAY: 24 DEC-FEB(%):                     | Y ARE AIR<br>USAGE IN<br>ECIAL NOT                   | EMISSION P<br>FORMATION<br>(ES OF FOR<br>DAYS/WEI<br>MAY(%):<br>25   | I AND FUEL US<br>M 202-CAAPP.<br>7<br>EK:<br>7<br>JUN-AUG(9<br>25 | SAGE DA                                 | TA WERE  5/YEAR:  52  5/YEAR:  52  SEP-NOV(%):     |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS  | PRMAT 220-1        | E EXTENT THE ION, MATERIAL REFER TO SP HOURS/DAY: 24 HOURS/DAY: 24 DEC-FEB(%):                     | Y ARE AIR<br>USAGE IN<br>ECIAL NOT<br>MAR<br>AGE INF | EMISSION P<br>FORMATION<br>(ES OF FOR<br>DAYS/WEI<br>MAY(%):<br>25   | I AND FUEL US M 202-CAAPP. FK: 7 JUN-AUGG N                       | SAGE DA                                 | TA WERE  5/YEAR:  52  5/YEAR:  52  SEP-NOV(%):  25 |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS  | RMAT 220-1         | E EXTENT THE ION, MATERIAL REFER TO SP HOURS/DAY:  HOURS/DAY: 24 DEC-FEB(%): 25  ATERIAL US        | Y ARE AIR<br>USAGE IN<br>ECIAL NOT<br>MAR<br>AGE INF | EMISSION P<br>FORMATION<br>(ES OF FOR<br>DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI | I AND FUEL US M 202-CAAPP. FK: 7 JUN-AUGG N                       | WEEKS                                   | TA WERE  5/YEAR:  52  5/YEAR:  52  SEP-NOV(%):  25 |  |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOURS<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year<br>20) ANNUAL THROUGHPUT | RMAT 220-1         | E EXTENT THE ION, MATERIAL REFER TO SP HOURS/DAY: 24 HOURS/DAY: 24 DEC-FEB(%): 25  ATERIAL US      | YARE AIR<br>USAGE IN<br>ECIAL NOT<br>MAR<br>AGE INF  | EMISSION P<br>FORMATION<br>(ES OF FOR<br>DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI<br>(DAYS/WEI | I AND FUEL US M 202-CAAPP.  FK: 7 JUN-AUG(9 25  N                 | WEEKS                                   | TA WERE  5/YEAR: 52  5/YEAR: 52  SEP-NOV(%): 25    |  |  |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT 19a) MAXIMUM OPERATING HOURS 8760 per year 8600 per year 20) ANNUAL THROUGHPUT  | RMAT 220-1         | E EXTENT THE ION, MATERIAL REFER TO SP HOURS/DAY: 24 HOURS/DAY: 24 DEC-FEB(%): 25  ATERIAL US      | YARE AIR<br>USAGE IN<br>ECIAL NOT<br>MAR<br>AGE INF  | EMISSION FORMATION (ES OF FOR DAYS/WEI)  DAYS/WEI  DAYS/WEI  AMAY(%):  25  DRMATIO   | I AND FUEL US M 202-CAAPP.  FK: 7 JUN-AUG(9 25  N                 | WEEKS                                   | TA WERE  5/YEAR: 52  5/YEAR: 52  SEP-NOV(%): 25    |  |  |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT 19a) MAXIMUM OPERATING HOURS 8760 per year 8600 per year 20) ANNUAL THROUGHPUT  | RMAT 220-1         | E EXTENT THE ION, MATERIAL REFER TO SP HOURS/DAY: 24 HOURS/DAY: 24 DEC-FEB(%): 25  ATERIAL US      | YARE AIR<br>USAGE IN<br>ECIAL NOT<br>MAR<br>AGE INF  | EMISSION F<br>FORMATION<br>(ES OF FOR<br>DAYS/WEI<br>(DAYS/WEI<br>25<br>DRMATIO<br>(EAR<br>420   | I AND FUEL US M 202-CAAPP.  FK: 7 JUN-AUG(9 25  N                 | WEEKS                                   | TA WERE  5/YEAR: 52  5/YEAR: 52  SEP-NOV(%): 25    |  |  |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT 19a) MAXIMUM OPERATING HOURS 8760 per year 8600 per year 20) ANNUAL THROUGHPUT  | RMAT 220-1         | E EXTENT THE ION, MATERIAL REFER TO SP HOURS/DAY: 24 HOURS/DAY: 24 DEC-FEB(%): 25  ATERIAL US      | YARE AIR<br>USAGE IN<br>ECIAL NOT<br>MAR<br>AGE INF  | EMISSION F<br>FORMATION<br>(ES OF FOR<br>DAYS/WEI<br>(DAYS/WEI<br>25<br>DRMATIO<br>(EAR<br>420   | I AND FUEL US M 202-CAAPP.  FK: 7 JUN-AUG(9 25  N                 | WEEKS                                   | TA WERE  5/YEAR: 52  5/YEAR: 52  SEP-NOV(%): 25    |  |  |

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| The state of the s | MAXIMUM RATES                           |   |                     |   |           | TYPICAL RATES                                |                |   |  |
|--|---|---|---------------------|---|-----------|--|----------------|---|--|
| 21b) PRODUCTS  | *************************************** | L8S/HR                                  |                     | TONS/YEAR                               |           | LBS/HR                                       | <b></b>        | TONS/YEAR                               |  |
| N/A  |   |   |                     |   | 8         | ***************************************      |                |   |  |
|  |   | *************************************** | -                   | *************************************** | 8         | MMccccccccc                                  |                | *************************************** |  |
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| Para Para Para Para Para Para Para Para  | 0000000000000                           | MAXIMI                                  | UM R                | ATES                                    | ſ         | TYPIC  | AL F           | RATES                                   |  |
| 21c) BY-PRODUCT MATERIALS  |   | LBS/HR                                  |                     | TONS/YEAR                               | ľ         | LBS/HR                                       |                | TONS/YEAR                               |  |
| N/A  |   |   | L                   | ••••••                                  |           | ~~~  |                | *************************************** |  |
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|  | Washington,                             |   |                     |   |           |  |                | ~~~~~                                   |  |
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|  | 300000000000000000000000000000000000000 | FUEL                                    | <br>US              | AGE DATA                                | 00000000  | .00000000000000000000000000000000000000      | x000000000     | 000000000000000000000000000000000000000 |  |
| 22a) MAXIMUM FIRING RATE<br>(MILLION BTU/HR):  | *************************************** | b) TYPICAL I<br>(MILLION                | FIRIN               | IG RATE                                 |           | c) DESIGN CAPAC<br>RATE (MILLION             |                |   |  |
| NA   |   | -                                       | N/                  |   |           |  |                |   |  |
| d) FUEL TYPE:  |   | *************************************** |                     | 000000000000000000000000000000000000000 |           | <b>*************************************</b> | ***********    | 000000000000000000000000000000000000000 |  |
| ONATURAL GAS OFUE  | = OIL                                   | - CDADE NU                              | anet                | . Oc                                    | ጣል        | . Олтнек                                     |                |   |  |
| IF MORE THAN ONE FUEL IS U   |   |   |                     |   |           |  |                |   |  |
| e) TYPICAL HEAT CONTENT OF I<br>BTU/GAL OR BTU/SCF):   | FUEL                                    | (BTU/LB,                                | <b>УМ</b> инининеро | f) TYPICAL SULI<br>GAS):                | FUF       | CONTENT (WT %                                | 5., N          | A FOR NATURAL                           |  |
| g) TYPICAL ASH CONTENT (WT   | %., N                                   | IA FOR NATUI                            | RAL                 | h) ANNUAL FUE                           | EL I      | JSAGE (SPECIFY)                              | ÜNF            | rs. e.g.,                               |  |
| GAS):  | ••                                      | -                                       |                     |   |           | MEAR, TONMEAR                                |                |   |  |
| 23) ARE COMBUSTION EMISSION:<br>PROCESS UNIT EMISSIONS?  | S DUC                                   | TED TO THE                              | SAN                 | L<br>HE STACK OR CONT                   | TRC       | NAS C  | ) <sub>v</sub> | es O m                                  |  |
| IF NO, IDENTIFY THE EXHAUS   | T PO                                    | INT FOR COM                             | IBUS                | TION EMISSIONS:                         |           |  |                |   |  |
|  |   |   |                     |   |           |  |                |   |  |
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|   | APPLICABLE RU  |  |
|---|--|--|
| 24) PROVIDE ANY SPECIFIC EMISSION STANDARD<br>REGULATED AIR POLLUTANT(S)  | (S) AND LIMITATION(S) SET BY RULE(S) WHICH A<br>EMISSION STANDARD(S) | ARE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.204(j)(4), 3.5 LBS/GAL): #GOUIREMENT(S) |
| {   |  |  |
| VOM (WB1 Scrubber 2)  | 35 IAC 218.302(b)  | At least 85% recovery of total uncontrolled org. mat.  |
| HAP (WB1 Scrubber 2)  | 40CFR 63.362   | 99% reduction or 1 ppm outlet  |
| 25) PROVIDE ANY SPECIFIC RECORDICEPING RU                                 |  |  |
| REGULATED AIR POLLUTANT(S)  | RECORDKEEPING RULE(S)  | REQUIREMENT(S)   |
| Standards don't apply to backvent   | 40 CFR 63.10   | MACT recordkeeping and reporting   |
| but do apply to W81 Scrubber 2  |  |  |
| 26) PROVIDE ANY SPECIFIC REPORTING RULE(S)  REGULATED AIR POLLUTANT(S)    | REPORTING RULE(S)  | REQUIREMENT(5)   |
| Standards don't apply to backvent but do apply to WB1 Scrubber 2          | 40 CFR 63.10   | MACT recordkeeping and reporting   |
| 27) PROVIDE ANY SPECIFIC MONITORING RULE(S                                | WHICH ARE APPLICABLE TO THIS EMISSION UN                             | #T:  |
| REGULATED AIR POLLUTANT(S)  | MONITORING RULE(8)   | REQUIREMENT(3)   |
| HAP monitoring applies to   | 40CFR 63.364   | Weekly Scrubber liquor level   |
| WB1 Scrubber 2 and dry beds   | 40CFR 63.364   | Weekly EO concentration from dry beds  |
|   |  |  |
| 28) PROVIDE ANY SPECIFIC TESTING RULES AND/<br>REGULATED AIR POLLUTANT(S) | OR PROCEDURES WHICH ARE APPLICABLE TO 1<br>TESTING RULE(S)           | THIS EMISSION UNIT:  REQUIREMENT(S)  |
| HAP applies to WB1 Scrubber 2   | 40 CFR63.365   | Testing of control equipment   |
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|---|---|---|---|--|--|--|--|--|--|
| 29) DOES THE EMISSION UNIT QUALIFY FOR AN EXEMPT<br>OTHERWISE APPLICABLE RULE?  | ION FROM AN                             | O YES                                   | Ø NO                                    |  |  |  |  |  |  |
| IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 220-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION. |   |   |   |  |  |  |  |  |  |
| COMPLIANCE INFORMATION  |   |   |   |  |  |  |  |  |  |
|   | 00000000000000000000000000000000000000  |   |   |  |  |  |  |  |  |
| 30) IS THE EMISSION UNIT IN COMPLIANCE WITH ALL AP<br>REQUIREMENTS?   | 7LIUABLE                                | ∀ES                                     | U NO                                    |  |  |  |  |  |  |
| IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE ADDENDUM FOR NON<br>COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.   |   |   |   |  |  |  |  |  |  |
| 31) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO 8   | E, OR WAS PREVIOUSLY, DE                | IONSTRATED:                             | *************************************** |  |  |  |  |  |  |
| Ethylene Oxide and Propylene oxide usage is tra-  | cked monthly.                           |   |   |  |  |  |  |  |  |
| WB Scrubber 2 was tested January 23, 2003   |   |   |   |  |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |  |
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|   |   |   |   |  |  |  |  |  |  |
| 32) EXPLANATION OF HOW ONGOING COMPLIANCE WILL  | BE DEMONSTRATED:                        |   |   |  |  |  |  |  |  |
| •   |   | A                                       |   |  |  |  |  |  |  |
| Records of Ethylene Oxide (EO) and Propylene O  |   |   |   |  |  |  |  |  |  |
| WB1 Scrubber 2 is required to monitor scrubber li   |   |   |   |  |  |  |  |  |  |
| EO concentration is checked weekly to determine   | brober oberation of the D               | ry bed Unit.                            |   |  |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |  |
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| TESTING, MONITORING, RECORDKEEPING AND REPORTING  |   |   |   |  |  |  |  |  |  |
| 33a) LIST THE PARAMETERS THAT RELATE TO AIR EMISS   | SIONS FOR WHICH RECORDS                 | ARE BEING MA                            |   |  |  |  |  |  |  |
| DETERMINE FEES, RULE APPLICABILITY OR COMPLI<br>METHOD OF MEASUREMENT, AND THE FREQUENCY  |   |   |   |  |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |  |
| PARAMETER UNIT OF MEASUREMENT   | METHOD OF MEASUREMENT                   | - FRE                                   | QUENCY                                  |  |  |  |  |  |  |
| Sterilant Usage pounds  | Operating data                          | monthly                                 | ~~~~                                    |  |  |  |  |  |  |
| Liquor level inches   | Operating data                          | weekly                                  |   |  |  |  |  |  |  |
| EO conc ppm   | GLC from dry bed                        | weekly                                  |   |  |  |  |  |  |  |
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|   |   | 1 1                                     |   |  |  |  |  |  |  |

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| RECORDED PARAMET                                     | TER INCLUDE THE METHOD   | CORDS WILL BE CREATED AND M<br>OF RECORDKEEPING, TITLE OF I | PERSON RESPONSIBLE FOR                  |  |  |  |  |  |  |
|--|--|---|---|--|--|--|--|--|--|
| revordreeming, an                                    | RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECO |   |   |  |  |  |  |  |  |
| PARAMETER  | RECORDICEPING  | PERSON RESPONSIBLE  | TITLE OF CONTACT PERSON                 |  |  |  |  |  |  |
| Sterilant usage                                      | Operating report   | General Manager   | EH&S                                    |  |  |  |  |  |  |
| Liquor Level   | PM records   | General Manager   | EH&S                                    |  |  |  |  |  |  |
| EO conc  | PM Records   | General Manager   | EH&S                                    |  |  |  |  |  |  |
|  |  |   |   |  |  |  |  |  |  |
|  | ***************************************                          |   | *************************************** |  |  |  |  |  |  |
|  |  |   |   |  |  |  |  |  |  |
| c) IS COMPLIANCE OF THE<br>THE RECORDS?              | EMISSION UNIT READILY (  | DEMONSTRATED BY REVIEW OF                                   | 🛭 🖰 YES U NO 📗                          |  |  |  |  |  |  |
| IF NO, EXPLAIN:                                      |  |   |   |  |  |  |  |  |  |
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|  |  |   |   |  |  |  |  |  |  |
| d) ARE ALL RECORDS REA                               | IDILY AVAILABLE FOR INSP   | ECTION, COPYING AND   | 8 yes 0 no                              |  |  |  |  |  |  |
| SUBMITTAL TO THE AGE                                 | ENCY UPON REQUEST?   |   | CY 165 W NO                             |  |  |  |  |  |  |
| IF NO, EXPLAIN:                                      |  |   |   |  |  |  |  |  |  |
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|  |  |   |   |  |  |  |  |  |  |
| 34a) DESCRIBE ANY MONITI<br>COMPLIANCE:              | ORS OR MONITORING ACTI   | VITIES USED TO DETERMINE FEE                                | S, RULE APPLICABILITY OR                |  |  |  |  |  |  |
| Monitor and record the le                            | evel of the scrubber liqu  | or in recirculation tank.                                   |   |  |  |  |  |  |  |
| Monitor the EtO concent                              | tration entering and exiti                                       | ng the AATDry Beds.   |   |  |  |  |  |  |  |
|  |  |   |   |  |  |  |  |  |  |
|  |  |   |   |  |  |  |  |  |  |
|  |  | (E.G., VOM EMISSIONS TO ATMOS                               | PHERE)?                                 |  |  |  |  |  |  |
| Level of scrubber liquor.<br>EtO levels from the AAT |  |   |   |  |  |  |  |  |  |
| mm icacis ilcili ilic vali                           | wy ucus.   |   |   |  |  |  |  |  |  |
|  |  |   |   |  |  |  |  |  |  |
|  |  |   |   |  |  |  |  |  |  |
| c) DESCRIBE THE LOCATION                             | ON OF EACH MONITOR (E.G  | ., IN STACK MONITOR 3 FEET FRO                              | M EXIT):                                |  |  |  |  |  |  |
|  |  |   |   |  |  |  |  |  |  |
|  |  |   |   |  |  |  |  |  |  |
|  |  |   |   |  |  |  |  |  |  |
|  |  |   |   |  |  |  |  |  |  |

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| 34d) IS EACH MONITOR EQUIPPED V                               | VITH A RECORDING DEVICE                        | ••••••••••••••••••••••••••••••••••••••            |   | O yes                                   | <b>Ø</b> NO                             |
|---|--|---|---|---|---|
| IF NO, LIST ALL MONITORS WITHO                                | UT A RECORDING DEVICE:                         |   |   |   |   |
| N/A   |  |   |   |   |   |
|   |  |   |   |   |   |
| 2000  |  |   |   |   |   |
|   |  |   |   |   |   |
|   |  | 9990/www.mangagagagagagagagagagagagagagagagagagag | 000000000000000000000000000000000000000 |   |   |
| e) IS EACH MONITOR REVIEWED FOF<br>BASIS?                     | R ACCURACY ON AT LEAST A                       | (QUARTERL)  | Y                                       | Q yes                                   | O NO                                    |
| IF NO, EXPLAIN:   |  |   |   |   |   |
| N/A   |  |   |   |   |   |
|   |  |   |   |   |   |
|   |  |   |   |   |   |
|   |  |   |   |   |   |
|   |  |   |   |   |   |
| 1) IS EACH MONITOR OPERATED AT A                              | ALL TIMES THE ASSOCIATED                       | EMISSION L  | JNIT IS                                 | O YES                                   | Ø NO                                    |
| IF NO, EXPLAIN:   |  |   |   |   |   |
| No continuous monitoring is requ                              | ired   |   |   |   |   |
| and make the same and a south the same and an                 | vo noo y                                       |   |   |   |   |
|   |  |   |   |   |   |
|   |  |   |   |   |   |
|   |  |   |   |   |   |
| 35) PROVIDE INFORMATION ON THE M                              |  |   |   |   |   |
| PURPOSES OF THE DETERMINATI<br>DATE, TEST METHOD USED, TEST   |  |   |   |   |   |
| SUMMARY OF RESULTS. IF ADDIT                                  | IONAL SPACE IS NEEDED, A                       | TTACH AND L                                       | .ABEL AS E                              | XHIBIT 220-4:                           |   |
| TEST DATE TEST METHOD   | TESTING COMPANY                                | OPERAT<br>CONDITIO                                |   | SUMMARY OF                              | RESULTS                                 |
| 1/21/03   | Kremer Env.                                    | Normal  |   | > 99% effici                            |   |
|   | C C) 6/13 5 60 1 800 5 5 8 3                   |   |   |   |   |
|   |  |   |   | 000000000000000000000000000000000000000 |   |
|   |  | 000000000000000000000000000000000000000           |   | 222224                                  |   |
|   |  |   |   | *************************************** |   |
| ቀምና የሚኮኖኒማ መፈፃችም ፍ ስ ፤ የፍመሙ ሙ መማር እኒሳ  ሎ ም ላ ፡ ፡              | 979 90° 8 800 8 800 80 80 80 80 80 80 80 80 80 | 500 abusahan ban 18 6 2 100°                      | ოიიიიიიიიიიიიიიიიიიიიიიიიიიიიიიიიიიიი   | 50000000000000000000000000000000000000  |   |
| 36) DESCRIBE ALL REPORTING REQUI<br>SUBMITTALS TO THE AGENCY: | remen is and provide th                        | E HILE AND  | rneuveni                                | ur or kefori                            | \$                                      |
| REPORTING REQUIREMENTS  | TITLE OF REPORT                                |   |   | FREQUENCY                               |   |
| Annual emissions report                                       | Annual emissions re                            | port  | annual                                  | (per CAAPP)                             | 00000                                   |
| Excess emissions  | Excess emissions                               |   | semi-an                                 | *************************************** |   |
|   | 3000-1-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0       |   | 000000000000000000000000000000000000000 | 00000000000000000000000000000000000000  | *************************************** |
|   | <u> </u>                                       |   |   | *************************************** |   |

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|                            |          |                             |                               |   | (37)                        | EMISSION        | INFORMATION               |                     |                               |               |                               |
|----------------------------|----------|-----------------------------|-------------------------------|---|-----------------------------|-----------------|---------------------------|---------------------|-------------------------------|---------------|-------------------------------|
|                            |          |                             |                               | RSSION RATE<br>PLLED EMISSIO            | n rate                      |                 | ALLOWABLE B               | Y RULE EMISS        | ION RATE                      | PERMITTED EMS | SSION RATE                    |
| REGULATED AIR<br>POLLUTANT |          | LBS PER<br>HOUR<br>(LBS/HR) | TONS PER<br>YEAR<br>(TONS/YR) | <sup>3</sup> OTHER<br>TERMS             | <sup>3</sup> OTHER<br>TERMS | <sup>4</sup> DM | <sup>5</sup> RATE (UNITS) | APPLICABLE<br>RULES | TONS PER<br>YEAR<br>(TONS/YR) | RATE (UNITS)  | TONS PER<br>YEAR<br>(TONS/YR) |
| CARBON                     | MAXIMUM  |                             |                               | *************************************** |                             |                 | ( )                       |                     |                               |               |                               |
| MONOXIDE (CO)              | TYPICAL  |                             |                               |   |                             |                 |                           |                     |                               |               |                               |
| LEAD                       | MAXIMUM: |                             |                               |   |                             |                 | ( )                       |                     |                               |               |                               |
|                            | TYPICAL. |                             |                               |   |                             |                 |                           |                     |                               |               |                               |
| NITROGEN                   | MAXIMUM: |                             |                               |   |                             |                 |                           |                     |                               |               |                               |
| OXIDES (NOx)               | TYPICAL: |                             |                               |   | :                           |                 | ( )                       |                     |                               |               |                               |
| PARTICULATE                | MAXIMUM: |                             |                               |   |                             |                 | ( )                       |                     |                               |               |                               |
| MATTER (PART)              | TYPICAL  |                             |                               |   |                             |                 | ( )                       |                     |                               |               |                               |
| PARTICULATE MATTER <= 10   | MAXIMUM: |                             |                               |   | :                           |                 | ( )                       |                     |                               |               |                               |
| MICROMETERS<br>(PM10)      | TYPICAL  |                             |                               | <b></b>                                 |                             |                 | ( )                       |                     |                               |               |                               |
| SULFUR                     | Maximum: |                             |                               |   |                             |                 |                           |                     |                               |               |                               |
| DIOXIDE (SO2)              | TYPICAL: |                             |                               |   |                             |                 |                           |                     |                               |               |                               |
| VOLATILE<br>ORGANIC        | MAXIMUM: |                             |                               |   |                             |                 | ( )                       |                     |                               |               |                               |
| MATERIAL (VOM)             | TYPICAL: |                             |                               |   |                             |                 | { }                       |                     |                               |               |                               |
| OTHER,<br>SPECIFY:         | MAXINUM: | See Ex.                     | 220-A&B                       |   |                             |                 | ( )                       |                     |                               |               |                               |
|                            | TYPICAL: |                             |                               |   |                             |                 |                           |                     |                               |               |                               |
| EXAMPLE:<br>PARTICULATE    | MAXIMUM: | 5.00                        | 21.9                          | 0.3<br>GR/DSCF                          |                             | 1               | 6.0 (LBS/HR)              | 212.321             | 26.28                         | 5.5 LBSAAR    | 22                            |
| MATTER                     | TYPICAL: | 4.00                        | 14.4                          | 0.24<br>GR/DSCF                         |                             | 4               | 5.5 (LBS/HR)              | 212.321             | 19.80                         |               |                               |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-5.

<sup>1</sup> CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.

PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS UMIT WILL BE USED TO DETERMINE THE PERMIT FEE.

PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GRIDSCF, ETC.)

TOM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)

FRATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

|   |                            | (3:                  | 8) HAZARDOUS                           | AIR POLLUTAN                      | IT EMISSION I               | NFORMATIO         | N                             |   |  |
|---|----------------------------|----------------------|--|-----------------------------------|-----------------------------|-------------------|-------------------------------|---|--|
|   |                            |                      | O 1ACTU<br>O 1UNCC                     | IAL EMISSION RA<br>INTROLLED EMIS |                             | ALLOWABLE BY RULE |                               |   |  |
| NAME OF HAP<br>EMITTED                  | <sup>2</sup> CAS<br>NUMBER |                      | POUNDS PER<br>HOUR<br>(LBS/HR)         | TONS PER<br>YEAR<br>(TONS/YR)     | <sup>3</sup> OTHER<br>TERMS | <sup>4</sup> 0M   | <sup>5</sup> RATE OR STANDARD | APPLICABLE<br>RULE                      |  |
| Ethylene Oxide                          | 75-21-8                    | MAXIMUM:<br>TYPICAL  | See Exhibit                            | 220-A8B                           |                             |                   |                               |   |  |
| Propylene Oxide                         | 75-56-9                    | MAXIMUM:<br>TYPICAL. | See Exhibit                            | 220-A88                           |                             |                   |                               | *************************************** |  |
|   |                            | MAXIMUM:             | ······································ |                                   |                             |                   |                               |   |  |
|   |                            | TYPICAL.             |  |                                   |                             |                   |                               |   |  |
| 800                                     |                            | TYPICAL:             |  |                                   |                             |                   |                               |   |  |
|   |                            | MAXIMUM:<br>TYPICAL: |  |                                   |                             |                   |                               |   |  |
|   |                            | MAXIMUM:             |  |                                   |                             |                   |                               |   |  |
|   |                            | TYPICAL.<br>MAXIMUM  |  |                                   |                             |                   |                               |   |  |
| 000000000000000000000000000000000000000 |                            | TYPICAL:             |  |                                   |                             |                   |                               |   |  |
|   |                            | MAXIMUM:<br>TYPICAL: |  |                                   |                             |                   |                               |   |  |
| EXAMPLE:                                |                            | L                    | 10.0                                   | 1.2                               | <u> </u>                    |                   | 98% by wt control device      | CFR 61                                  |  |
| Senzene                                 | 71432                      | TYPICAL:             | 8.0                                    | 0.8                               |                             |                   | leak-light trucks             | 61.302(b).(d)                           |  |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED. ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-8.

PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY.

CAS - CHEMICAL ABSTRACT SERVICE NUMBER.

PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GRØSCF, ETC.).

<sup>4</sup>DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).

\*RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

| EXHAUST POINT INFORMATION  |   |   |                                 |  |  |  |  |  |  |
|--|---|---|---------------------------------|--|--|--|--|--|--|
| THIS SECTION SHOULD NOT BE COMPLETED   | IF EMISSIONS ARE E                      | XHAUSTED THROUGH /                      | UR POLLUTION CONTROL EQUIPMENT. |  |  |  |  |  |  |
| 39) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:   |   |   |                                 |  |  |  |  |  |  |
| WB1 Scrubber #2 with dry bed   |   |   |                                 |  |  |  |  |  |  |
| 40) DESCRIPTION OF EXHAUST POINT (STACK, VENT. ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS. |   |   |                                 |  |  |  |  |  |  |
| Outside Stack  | Outside Stack                           |   |                                 |  |  |  |  |  |  |
| 41) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):  |   |   |                                 |  |  |  |  |  |  |
| approx 20 feet   |   |   |                                 |  |  |  |  |  |  |
| 42) DISCHARGE HEIGHT ABOVE GRADE   | ( <b>FT</b> ):                          | ······                                  |                                 |  |  |  |  |  |  |
| approx 30 feet   |   |   |                                 |  |  |  |  |  |  |
| 43) GOOD ENGINEERING PRACTICE (GI  | P) HEIGHT, IF KN                        | OWN (FT):                               |                                 |  |  |  |  |  |  |
| Unknown  |   |   |                                 |  |  |  |  |  |  |
| 44) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA. 24 inches             |   |   |                                 |  |  |  |  |  |  |
| 45) EXIT GAS FLOW RATE   | a) MAXIMUM (AC                          | FM):                                    | b) TYPICAL (ACFM):              |  |  |  |  |  |  |
|  | 1:                                      | 5,500                                   | 15,500                          |  |  |  |  |  |  |
| 46) EXIT GAS TEMPERATURE   | a) MAXIMUM (°F)                         |   | b) TYPICAL (°F):                |  |  |  |  |  |  |
|  | apı                                     | 200x 75                                 | approx 75                       |  |  |  |  |  |  |
| 47) DIRECTION OF EXHAUST (VERTICAL   | LATERAL, DOW                            | NWARD):                                 |                                 |  |  |  |  |  |  |
| Vertical   |   |   |                                 |  |  |  |  |  |  |
| 48) LIST ALL EMISSION UNITS AND CON  | TROL DEVICES S                          | ERVED BY THIS EXH                       | NUST POINT:                     |  |  |  |  |  |  |
| NAME   |   | FLO                                     | W DIAGRAM DESIGNATION           |  |  |  |  |  |  |
| <sup>a)</sup> Aeration Rooms (current)   |   | AR                                      |                                 |  |  |  |  |  |  |
| b) Sterilizer Backvent SC1, SC2  | SC3, SC4                                | Backvent                                |                                 |  |  |  |  |  |  |
| c) Backup for Sterlizer Chamber  | s SC1-4                                 | vacuum pump                             |                                 |  |  |  |  |  |  |
| d)   |   | *************************************** |                                 |  |  |  |  |  |  |
| 6)   | *************************************** |   |                                 |  |  |  |  |  |  |
|  |   | *************************************** |                                 |  |  |  |  |  |  |
| THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE   |   |   |                                 |  |  |  |  |  |  |
|  | <u>3E SUPPLIED IF REA</u>               |   |                                 |  |  |  |  |  |  |
| THE FOLLOWING INFORMATION NEED ONLY: 49a) LATITUDE:  | <u>3E SUPPLIED IF REA</u>               | b) LONGITUDE:                           |                                 |  |  |  |  |  |  |
|  | BE SUPPLIED IF REA<br>b) UTM VERTICA    | b) LONGITUDE:                           | c) UTM HORIZONTAL (KM):         |  |  |  |  |  |  |

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#### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL — PERMIT SECTION P.O. BOX 19506 SPRINGFIELD, ILLINOIS 62794-9506

| Revisi | on#: _                                  |       | 000000000000000000000000000000000000000 | 0000000000  | 000000000000000000             |
|--------|---|-------|---|-------------|--------------------------------|
| Date:  |   | 1     |   | /           |                                |
| Page   | *************************************** |       | of                                      |             | ****************************** |
| Saum   | e Desig                                 | nati. | ww.                                     | *********** |                                |

#### PROCESS EMISSION UNIT DATA AND INFORMATION

|               | FOR AGENCY                                | USE ONLY                                |   |
|---------------|---|---|---|
| ID NUMBER:    | 98/06/30000000000000000000000000000000000 | 000000000000000000000000000000000000000 | 00000000000000000000000000000000000000  |
| EMISSION POIN | **:                                       |   | *************************************** |
| DATE:         | 100M-m/mmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmmm | *************************************** | *************************************** |
|               |   |   |   |

| SOURCE INFORMATION                    |   |  |  |  |  |  |  |  |
|---------------------------------------|---|--|--|--|--|--|--|--|
| 1) SOURCE NAME:                       |   |  |  |  |  |  |  |  |
| Sterigenics US, LLC                   |   |  |  |  |  |  |  |  |
| 2) DATE FORM<br>PREPARED: 30 May 2018 | 3) SOURCE ID NO.<br>(IF KNOWN): 043110AAC |  |  |  |  |  |  |  |

| GENERAL INFORMATION  |                                      |  |  |  |  |  |
|--|--------------------------------------|--|--|--|--|--|
| 4) NAME OF EMISSION UNIT: (1) Ethylene Oxide/Propylene oxide Sterilization Chambers (3 pallet capacity) SC-3 |                                      |  |  |  |  |  |
| 5) NAME OF PROCESS:  |                                      |  |  |  |  |  |
| Sterilization of medical products and spices   |                                      |  |  |  |  |  |
| 6) DESCRIPTION OF PROCESS:   |                                      |  |  |  |  |  |
| Chemical Sterilization   |                                      |  |  |  |  |  |
| 7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR A   | CTIVITY ACCOMPLISHED:                |  |  |  |  |  |
| Sterilized Medical Supplies and Treated Spices   |                                      |  |  |  |  |  |
| 8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT:  |                                      |  |  |  |  |  |
| Sterilizer Chambers  |                                      |  |  |  |  |  |
| 9) MANUFACTURER OF EMISSION UNIT (IF KNOWN):   |                                      |  |  |  |  |  |
| Unknown  |                                      |  |  |  |  |  |
| 10) MODEL NUMBER (IF KNOWN):   | 11) SERIAL NUMBER (IF KNOWN):        |  |  |  |  |  |
| unknown  | unknown                              |  |  |  |  |  |
| 12) DATES OF COMMENCING CONSTRUCTION,  | a) CONSTRUCTION (MONTH/YEAR):        |  |  |  |  |  |
| OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED)                          | June 1984                            |  |  |  |  |  |
| ·  | b) OPERATION (MONTH/YEAR):           |  |  |  |  |  |
|  | May 1985                             |  |  |  |  |  |
|  | c) LATEST MODIFICATION (MONTH/YEAR): |  |  |  |  |  |
|  | November 1990                        |  |  |  |  |  |
| 13) DESCRIPTION OF MODISIOATION /IS ABBI ICABI S)  |                                      |  |  |  |  |  |

The sterilization chambers includes the chamber vent (via vacuum pump) and the chamber exhaust vent (backvent) as one emission unit. The chamber exhaust vent currently exhausts uncontrolled to atmosphere. This modification proposes to control the backvent with scrubber #2 and dry bed reactor.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992.
CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY
PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN
APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE 🔔

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FOR APPLICANT'S USE

|  |   |   |   | _                                      |   |   |   |   |   |  |
|--|---|---|---|--|---|---|---|---|---|--|
| 14) DOES THE EMISSION UNIT HAVE MORE THAN ONE MODE OF OPERATION?  YES ONO  |   |   |   |  |   |   |   |   |   |  |
| IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE PROCESS EMISSION UNIT FORM 220-CAAPP MUST BE COMPLETED FOR EACH MODE):   |   |   |   |  |   |   |   |   |   |  |
| The sterilization chambers inc   | ludes   | the chambe                              | r ven                                   | t (via                                 | vacuum pu                               | mp) and the                             | cham                                    | ber ex                                  | thaust                                  |  |
| vent (backvent) as one emissi  | on un   | it. The char                            | mber l                                  | backv                                  | ent modific                             | ation is cov                            | ered by                                 | / this f                                | orm. The                                |  |
| chamber vent is controlled by  |   |   |   |  |   | ***                                     | ****************                        | *************************               |   |  |
| 15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT): |   |   |   |  |   |   |   |   |   |  |
| The chamber backvent is currently uncontrolled. This application proposes to duct the chamber  |   |   |   |  |   |   |   |   |   |  |
| exhaust vent (backvent) to the existing Acid Scrubber (scrubber #2) with Dry Bed Reactor. The  |   |   |   |  |   |   |   |   |   |  |
| information provided below is required for the existing control device.  |   |   |   |  |   |   |   |   |   |  |
| 16) WILL EMISSIONS DURING STARTUP EXCEED EITHER THE ALLOWABLE EMISSION OYES NO RATE PURSUANT TO A SPECIFIC RULE, OR THE ALLOWABLE EMISSION LIMIT AS SESTABLISHED BY AN EXISTING OR PROPOSED PERMIT CONDITION?  |   |   |   |  |   |   |   |   |   |  |
|  | IF YES, COMPLETE AND ATTACH FORM 203-CAAPP, "REQUEST TO OPERATE WITH EXCESS EMISSIONS DURING STARTUP OF EQUIPMENT". |   |   |  |   |   |   |   |   |  |
|  | 17) PROVIDE ANY LIMITATIONS ON SOURCE OPERATION AFFECTING EMISSIONS OR ANY WORK PRACTICE                            |   |   |  |   |   |   |   |   |  |
| STANDARDS (E.G., ONLY ONE<br>Monthly usage limitations for p   |   |   |   |  | . masida ntan                           | il mad awaaa                            | a nonn                                  | 200 200 £ 520 2                         | in mad                                  |  |
| 70,000 pounds respectively fo  |   |   |   |  |   | HIM CAUCC                               | 1 LOVU                                  | ham                                     | is and                                  |  |
| in'one honing ispharmally in   |   | iiissiuli uliii                         | 30 81 F W                               | A HHITTAN                              | MAUN I.                                 |   |   |   |   |  |
|  |   |   |   |  |   |   |   |   |   |  |
|  |   |   |   |  |   |   |   |   | 1                                       |  |
|  | 000000000000000000000000000000000000000   | *************************************** | *************************************** | *************                          |   |   | <b>*************</b>                    | 000000000000000000000000000000000000000 | ·····                                   |  |
|  | ***************************************   | OPERATI                                 | NG /A                                   | IFORI                                  | VIATION                                 | 200000000000000000000000000000000000000 | *************************************** | *************************************** | *************************************** |  |
| 18) ATTACH THE CALCULATIONS,<br>FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT   | RMAT  | ION, MATERIA                            | NL USA                                  | GE IN                                  | FORMATION                               | AND FUEL US                             | AGE D                                   |   | ERE                                     |  |
|  |   | g                                       | 000000000000000000000000000000000000000 | ~~~~~                                  |   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  |   |   |   |  |
| 19a) MAXIMUM OPERATING HOUR<br>8760 per year   | <b>&gt;</b>   | HOURS/DAY:                              |   |  | DAYS/WEE                                | 7                                       |   | KS/YEAR:<br>52                          |   |  |
|  | oooooooo  | 24                                      |   | ~~~~~~~~~~                             |   |   |   |   |   |  |
| b) TYPICAL OPERATING HOURS   |   | HOURS/DAY:                              |   | DAYS/WEEK:                             |   | WEEKS/YEAR:                             |   |   |   |  |
| 8600 per year  |   | 24                                      |   | y                                      |   | 7<br>                                   |   | 52                                      |   |  |
| 20) ANNUAL THROUGHPUT  |   | DEC-FEB(%                               | ):                                      | MAR-MAY(%):                            |   | JUN-AUG(%):                             |   | SEP-                                    | VOV(%):                                 |  |
|  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   | 25                                      |   | 25                                     |   | 25                                      | 25                                      |   | 25                                      |  |
|  |   | ATERIAL U                               | SAGI                                    | E INF                                  | ORMATIOI                                | ······································  | *************************************** | *************************************** |   |  |
|  | 000000000000000000000000000000000000000   | *************************************** |   | ×5×××0000000000                        | *************************************** |   | *************************************** |   |   |  |
|  | ************  | MAXIMU                                  | M RAT                                   | ES                                     |   | Ψ,                                      | YPICAL                                  | RATES                                   | ;                                       |  |
| 21a) RAW MATERIALS   |   | .BS/HR                                  |   | TONSA                                  | /#XD                                    | LBS/HR                                  |   | 777                                     | INS/YEAR                                |  |
| **************************************   |   | **************************************  |   | ······································ |   | E-2017                                  |   | ļ                                       |   |  |
| Ethylene Oxide   |   |   |   | ×                                      | 420                                     |   |   |   | ~~~                                     |  |
| Propylene oxide  |   | **************************************  |   |  | 17                                      |   | *************************************** |   | 000000                                  |  |
|  | ***************************************   |   | \$                                      | ~~~~                                   |   |   | ***********                             | h                                       |   |  |
|  |   |   |   | ~~~~                                   |   |   |   |   | *************************************** |  |
|  | ***********   | *************************************** |   | ~~~~~                                  |   | *****************************           |   | *************************************** |   |  |
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|  | 000000000000000000000000000000000000000 | *************************************** | 0000000000000                          | 000000000000000000000000000000000000000 | 20000000                                | *************************************** | 000000000000000000000000000000000000000 | ***************************************   |
|--|---|---|--|---|---|---|---|---|
|  |   | MAXIML                                  | IM R                                   | NTES                                    |   | TYPIC                                   | AL RAT                                  | TES .                                     |
| 21b) PRODUCTS  | *************************************** | LBS/HR                                  |  | TONS/YEAR                               |   | LBS/HR                                  |   | TONS/YEAR                                 |
| N/A  | *************************************** |   | -                                      | *************************************** |   | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |   | AM  |
|  | *************                           |   |  |   |   | *************************************** |   |   |
|  | ********                                |   |  |   | *************************************** | MMMM                                    |   | ······································    |
|  | wineseennggggg                          |   | -                                      | *************************************** |   | 000000000000000000000000000000000000000 |   |   |
|  | *************************************** |   | -                                      |   |   | *************************************** |   | ***************************************   |
| ***************************************                |   |   | -                                      |   |   | *************************************** |   | ······································    |
|  | ***************                         |   |  |   |   | 000000000000000000000000000000000000000 |   | (x=82000000000000000000000000000000000000 |
|  | *************************************** | JMIXAM                                  | 18.6 83.6                              | STEC                                    | ı                                       | TYPIC                                   | A: CAS                                  | 5-5-6 %v                                  |
|  |   |   | b<br>51A8 5276                         | TONS/YEAR                               |   | 000000000000000000000000000000000000000 |   |   |
| 21c) BY-PRODUCT MATERIALS                              | ***********                             | LBS/HR                                  |  | IUNS/YEAK                               |   | LBS/HR                                  |   | TONS/YEAR                                 |
| N/A  | -000000000000                           |   | -                                      | www                                     |   | ·····                                   |   |   |
|  | ************                            |   |  |   |   |   |   | ***************************************   |
|  | *************************************** |   |  |   |   |   |   |   |
|  | ******************************          |   |  |   |   |   |   |   |
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| ***************************************                | *************************************** |   |  |   | *************************************** |   |   |   |
|  | 000000000000000000000000000000000000000 | ······································  | 00000000000000000000000000000000000000 | 00000000000000000000000000000000000000  | **********                              | *************************************** |   | ***************************************   |
| 22a) MAXIMUM FIRING RATE                               | 000000000000000000000000000000000000000 | b) TYPICAL F                            | IRIN                                   | <b>4<i>GE DATA</i></b><br>GRATE         | *************************************** | c) DESIGN CAPAC                         | SITY FI                                 | RING                                      |
| (MILLION BTU/HR):                                      |   | (MILLION                                | BTU/                                   | RATE (MILLION BTU/HR):                  |   |   |   |   |
| N/A  |   |   | N//                                    | Å                                       |   | P                                       | I/A                                     |   |
| d) FUEL TYPE:  | 00000000000                             |   | AAAAA AAAA                             |   | mook                                    | *************************************** | *************************************** |   |
| Onatural gas Ofui                                      | EL OII                                  | .: GRADE NUN                            | IBER                                   | O                                       | 20/                                     | u Oother_                               |   | ***************************************   |
| IF MORE THAN ONE FUEL IS I                             |   |   |  |   |   |   |   |   |
| e) TYPICAL HEAT CONTENT OF                             | FUEL                                    | (BTU/LB,                                | 2000020000000                          |   | FÜ                                      | R CONTENT (WT %                         | NA F                                    | FOR NATURAL                               |
| BTU/GAL OR BTU/SCF):                                   |   |   |  | GAS):                                   |   |   |   |   |
|  |   |   |  |   |   |   |   |   |
| g) TYPICAL ASH CONTENT (WT<br>GAS):                    | %., N                                   | IA FOR NATUF                            | RAL                                    |   |   | USAGE (SPECIFY<br>LYEAR, TONYEAR        |   | , E.G.,                                   |
| •  |   |   |  |   |   | •                                       | •                                       |   |
| 23) ARE COMBUSTION EMISSION<br>PROCESS UNIT EMISSIONS? | S DU                                    | CTED TO THE                             | SAM                                    | É STACK OR CON                          | TR                                      | OL AS                                   | YES                                     | ONO                                       |
| IF NO, IDENTIFY THE EXHAUS                             | T PO                                    | INT FOR COM                             | BUST                                   | TON EMISSIONS:                          |   |   |   |   |
|  |   |   |  |   |   |   |   |   |
|  |   |   |  |   |   |   |   |   |
|  |   |   |  |   |   |   |   |   |

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|   | APPLICABLE RUL   |   |
|---|--|---|
| ·   | )(S) AND LIMITATION(S) SET BY RULE(S) WHICH AR                   | E APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.204(j)(4), 3.5 LBS/GAL): |
| REGULATED AIR POLLUTANT(9)  | EMISSION STANDARD(S)   | REQUIREMENT(S)  |
| VOM (WB1 Scrubber 2)  | 35 IAC 218.302(b)  | At least 85% recovery of total uncontrolled org. mat.                           |
| HAP (WB1 Scrubber 2)  | 40CFR 63.362   | 99% reduction or 1 ppm outlet   |
|   | J LE(S) WHICH ARE APPLICABLE TO THIS EMISSION                    |   |
| REGULATED AIR POLLUTANT(S)  | RECORDKEEPING RULE(S)  | REQUIREMENT(5)  |
| Standards don't apply to backvent                                     | 40 CFR 63.10   | MACT recordkeeping and reporting  |
| but do apply to WB1 Scrubber 2  |  |   |
| 26) PROVIDE ANY SPECIFIC REPORTING RULE(S) REGULATED AIR POLLUTANT(S) | WHICH ARE APPLICABLE TO THIS EMISSION UNIT:<br>REPORTING RULE(S) | REQUIREMENT(S)  |
| Standards don't apply to backvent                                     | 40 CFR 63.10   | MACT recordkeeping and reporting  |
| but do apply to WB1 Scrubber 2  |  |   |
| 27) PROVIDE ANY SPECIFIC MONITORING RULE(S                            | J L S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT                |   |
| REGULATED AIR POLLUTANT(S)  | MONITORING RULE(9)   | REQUIREMENT(S)  |
| HAP monitoring applies to   | 40CFR 63.364   | Weekly Scrubber liquor level  |
| WB1 Scrubber 2 and dry beds   | 40CFR 63.364   | Weekly EO concentration from dry beds   |
|   |  |   |
| 28) PROVIDE ANY SPECIFIC TESTING RULES AND REGULATED AIR POLLUTANT(S) | VOR PROCEDURES WHICH ARE APPLICABLE TO TH<br>TESTING RULE(S)     | REQUIREMENT(S)  |
| HAP applies to WB1 Scrubber 2   | 40 CFR63.365   | Testing of control equipment  |
|   |  |   |
|   |  |   |

| 29) DOES THE EMISSION UNIT QUALIFY F  |   | 000000000000000000000000000000000000000  | 000000000000000000000000000000000000000 |  |  |  |  |  |  |  |  |  |
|---|---|--|---|--|--|--|--|--|--|--|--|--|
| OTHERWISE APPLICABLE RULE?  | OR AN EXEMPTION FROM AN   | O YES  | Ø NO                                    |  |  |  |  |  |  |  |  |  |
| IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 220-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION. |   |  |   |  |  |  |  |  |  |  |  |  |
|   |   | ***************************************  | *************************************** |  |  |  |  |  |  |  |  |  |
| COMPLIANCE INFORMATION  |   |  |   |  |  |  |  |  |  |  |  |  |
| 30) IS THE EMISSION UNIT IN COMPLIANC<br>REQUIREMENTS?  | CE WITH ALL APPLICABLE  | Ø yes  | O NO                                    |  |  |  |  |  |  |  |  |  |
| IF NO, THEN FORM 294-CAAPP "COMP<br>COMPLYING EMISSION UNITS" MUST I  |   |  |   |  |  |  |  |  |  |  |  |  |
| 31) EXPLANATION OF HOW INITIAL COMP   | LIANCE IS TO BE, OR WAS PREVIOUS  | LY, DEMONSTRATED:  | 00000000000000000000000000000000000000  |  |  |  |  |  |  |  |  |  |
| Ethylene Oxide and Propylene oxide  | e usage is tracked monthly.   |  |   |  |  |  |  |  |  |  |  |  |
| WB Scrubber 2 was tested January  | 23, 2003  |  |   |  |  |  |  |  |  |  |  |  |
| ·   |   |  |   |  |  |  |  |  |  |  |  |  |
|   |   |  |   |  |  |  |  |  |  |  |  |  |
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| ማስ፤ ምህምል ልእያልማነውን ነ ማም የተማየስ ምልተማማነያኒማ ማም   | 8 8205 5 6 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8  | 000000000000000000000000000000000000000  | ······????????????????????????????????  |  |  |  |  |  |  |  |  |  |
| 32) EXPLANATION OF HOW ONGOING CO   |   |  |   |  |  |  |  |  |  |  |  |  |
| Records of Ethylene Oxide (EO) and  |   |  |   |  |  |  |  |  |  |  |  |  |
| WB1 Scrubber 2 is required to moni  | * *   | •  |   |  |  |  |  |  |  |  |  |  |
| EO concentration is checked weekly to determine proper operation of the Dry Bed Unit.   |   |  |   |  |  |  |  |  |  |  |  |  |
| CO CONCERNIANON IS CHECKED WEEKIY   | mor more reconsistics prisoners acoustic an properties in properties of properties of the print print print.  |  |   |  |  |  |  |  |  |  |  |  |
| EO concentration is checked weekly  |   |  |   |  |  |  |  |  |  |  |  |  |
| EO CONCERNATION IS CHECKED WEEKLY   |   |  |   |  |  |  |  |  |  |  |  |  |
| EO COncentiation is checked weekly  |   |  |   |  |  |  |  |  |  |  |  |  |
| CO COncentration is Checked weekly  |   |  |   |  |  |  |  |  |  |  |  |  |
| EO COncentration is Checked weekly  |   |  |   |  |  |  |  |  |  |  |  |  |
| EO COncentration is Checked weekly  |   |  |   |  |  |  |  |  |  |  |  |  |
| CO COncentration is Checked weekly  |   |  |   |  |  |  |  |  |  |  |  |  |
|   | P. M. J. J. J. M. M. J. |  |   |  |  |  |  |  |  |  |  |  |
| TESTING, MONIT  | ORING, RECORDKEEPING AND  |  | SINT SILES TO                           |  |  |  |  |  |  |  |  |  |
| TESTING, MONIT  33a) LIST THE PARAMETERS THAT RELAT DETERMINE FEES, RULE APPLICABIL   | E TO AIR EMISSIONS FOR WHICH REC  | ORDS ARE BEING MA<br>JNIT OF MEASUREME   | INT, THE                                |  |  |  |  |  |  |  |  |  |
| TESTING, MONIT  33a) LIST THE PARAMETERS THAT RELAT DETERMINE FEES, RULE APPLICABIL   | E TO AIR EMISSIONS FOR WHICH REC  | ORDS ARE BEING MA<br>JNIT OF MEASUREME   | INT, THE                                |  |  |  |  |  |  |  |  |  |
| TESTING, MONIT<br>33a) LIST THE PARAMETERS THAT RELAT<br>DETERMINE FEES, RULE APPLICABIL<br>METHOD OF MEASUREMENT, AND TH   | E TO AIR EMISSIONS FOR WHICH REC<br>ITY OR COMPLIANCE. INCLUDE THE I<br>HE FREQUENCY OF SUCH RECORDS (  | CORDS ARE BEING M<br>JNIT OF MEASUREME<br>E.G., HOURLY, DAILY,   | NT, THE<br>, WEEKLY):                   |  |  |  |  |  |  |  |  |  |
| TESTING, MONIT  33a) LIST THE PARAMETERS THAT RELAT DETERMINE FEES, RULE APPLICABIL METHOD OF MEASUREMENT, AND TH   | E TO AIR EMISSIONS FOR WHICH REC<br>ITY OR COMPLIANCE. INCLUDE THE N<br>HE FREQUENCY OF SUCH RECORDS (<br>SUREMENT METHOD OF MEASURE  | CORDS ARE BEING M<br>JNIT OF MEASUREME<br>E.G., HOURLY, DAILY,<br>MENT FRE                                 | INT, THE<br>, WEEKLY):<br>QUENCY        |  |  |  |  |  |  |  |  |  |
| TESTING, MONIT<br>33a) LIST THE PARAMETERS THAT RELAT<br>DETERMINE FEES, RULE APPLICABIL<br>METHOD OF MEASUREMENT, AND TH   | E TO AIR EMISSIONS FOR WHICH REC<br>ITY OR COMPLIANCE. INCLUDE THE I<br>HE FREQUENCY OF SUCH RECORDS (  | CORDS ARE BEING M<br>JNIT OF MEASUREME<br>E.G., HOURLY, DAILY,   | INT, THE<br>, WEEKLY):<br>QUENCY        |  |  |  |  |  |  |  |  |  |
| TESTING, MONIT  33a) LIST THE PARAMETERS THAT RELAT DETERMINE FEES, RULE APPLICABIL METHOD OF MEASUREMENT, AND TH   | E TO AIR EMISSIONS FOR WHICH REC<br>ITY OR COMPLIANCE. INCLUDE THE N<br>HE FREQUENCY OF SUCH RECORDS (<br>SUREMENT METHOD OF MEASURE  | CORDS ARE BEING M<br>JNIT OF MEASUREME<br>E.G., HOURLY, DAILY,<br>MENT FRE                                 | INT, THE<br>, WEEKLY):<br>QUENCY        |  |  |  |  |  |  |  |  |  |
| TESTING, MONIT  33a) LIST THE PARAMETERS THAT RELAT DETERMINE FEES, RULE APPLICABIL METHOD OF MEASUREMENT, AND TH  PARAMETER UNIT OF MEA Sterilant Usage pounds   | E TO AIR EMISSIONS FOR WHICH REC<br>ITY OR COMPLIANCE. INCLUDE THE V<br>HE FREQUENCY OF SUCH RECORDS (<br>SUREMENT METHOD OF MEASURE<br>Operating data  | CORDS ARE BEING M<br>JNIT OF MEASUREME<br>E.G., HOURLY, DAILY,<br>MENT FRE<br>MONTHIN<br>MONTHIN<br>Weekly | NT, THE<br>, WEEKLY):<br>OUENCY         |  |  |  |  |  |  |  |  |  |
| TESTING, MONIT  33a) LIST THE PARAMETERS THAT RELAT DETERMINE FEES, RULE APPLICABIL METHOD OF MEASUREMENT, AND TH  PARAMETER UNIT OF MEA  Sterilant Usage pounds  Liquor level inches   | E TO AIR EMISSIONS FOR WHICH REC<br>ITY OR COMPLIANCE. INCLUDE THE V<br>HE FREQUENCY OF SUCH RECORDS (<br>SUREMENT METHOD OF MEASURE<br>Operating data<br>Operating data  | CORDS ARE BEING M<br>JNIT OF MEASUREME<br>E.G., HOURLY, DAILY,<br>MENT FRE<br>MONTHIN<br>MONTHIN<br>Weekly | INT, THE<br>, WEEKLY):<br>QUENCY        |  |  |  |  |  |  |  |  |  |

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|  |  | ORDS WILL BE CREATED AND MOOF RECORDKEEPING, TITLE OF F   |   |
|--|--|---|---|
|  |  | NTACT FOR REVIEW OF RECORD                                |   |
| PARAMETER  | METHOD OF<br>RECORDKEEPING   | TITLE OF<br>PERSON RESPONSIBLE                            | TITLE OF<br>CONTACT PERSON              |
| Sterilant usage                                    | Operating report   | General Manager   | EH&S                                    |
| Liquor Level                                       | PM records   | General Manager   | EH&S                                    |
| EO conc  | PM Records   | General Manager   | EH&S                                    |
| ***************************************            | ***************************************                              | ***************************************                   | *************************************** |
|  | ***************************************                              |   | *************************************** |
| **************************************             |  | **************************************                    | ······································  |
| THE RECORDS?                                       | EEMISSION UNIT KEAUILY D   | EMONSTRATED BY REVIEW OF                                  | Ø yes U no                              |
| IF NO. EXPLAIN:                                    |  |   |   |
|  |  |   |   |
|  |  |   |   |
|  |  |   |   |
| 24 A 22 C A 2 R 22 2 P 2 P 2 P 2 P 2 P 2 P 2 P 2 P | . TO 10 2.5 R. 1 R. 1 R. 22 5 FF FF FF 22 22 22 22 22 22 22 22 22 22 | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~                    |   |
| SUBMITTAL TO THE AGI                               | IDILY AVAILABLE FOR INSPE<br>ENCY UPON REQUEST?                      | CHUR, COPTHIS AND   | Ø yes O no                              |
| IF NO, EXPLAIN:                                    |  |   |   |
|  |  |   |   |
|  |  |   |   |
|  |  |   |   |
| 74-1 CCCCCCC SAIV BACKIT                           | ADE AB HANTAUMA ACTI   | VITIES USED TO DETERMINE FEE                              | C DINC ADD MADNITY AD                   |
| COMPLIANCE   |  |   | 3, NULE AFFLINABILII I UN               |
|  | evel of the scrubber liquo<br>tration entering and exitin            |   |   |
| MONIOUR ELV CONCEIN                                | iaini siisinä ain aviii  | y ula wi niy bada.  |   |
|  |  |   |   |
|  |  | E.G., VOM EMISSIONS TO ATMOS                              | PHERE)?                                 |
| Level of scrubber liquor.                          |  |   |   |
| EtO levels from the AAT                            | ury beas.  |   |   |
|  |  |   |   |
|  | ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~                                | ON O DEPTH SO THE OR O DE O STANDER OF THE OWNER WHEN THE | 00000000000000000000000000000000000000  |
| C) DESCRIBE THE LOCATION                           | jn up each munitok (E.G.   | , IN STACK MONITOR 3 FEET FRO                             | m exii):                                |
|  |  |   |   |
|  |  |   |   |
|  |  |   |   |

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| 34d) IS EACH MONITOR EQUIPPED V  | WITH A RECORDING DEVICE                             | ?                                       |   | es Ono                                  |
|--|---|---|---|---|
| IF NO, LIST ALL MONITORS WITHO   | OUT A RECORDING DEVICE:                             |   |   | 900000PF - 47 100F                      |
| N/A  |   |   |   |   |
|  |   |   |   | !                                       |
|  |   |   |   |   |
|  |   |   |   |   |
| e) IS EACH MONITOR REVIEWED FOI<br>BASIS7  | R ACCURACY ON AT LEAST A                            | OUARTERLY                               | O yı                                    | s O no                                  |
| IF NO, EXPLAIN:  |   |   |   |   |
| WA   |   |   |   |   |
|  |   |   |   |   |
|  |   |   |   |   |
|  |   |   |   |   |
| M. 1 do 10° A 10° C J 2 0 N 1 2 1 10° M 10 | 00000000000000000000000000000000000000              | **************************************  | 2000                                    |   |
| f) IS EACH MONITOR OPERATED AT IN OPERATION?   | ALL TIMES THE ASSOCIATE                             | ) EMISSIUN Ur                           | "" U YI                                 | s Ø NO                                  |
| IF NO, EXPLAIN:  |   |   |   |   |
| No continuous monitoring is requ   | iired.  |   |   |   |
|  |   |   |   |   |
|  |   |   |   |   |
|  |   |   |   |   |
| 35) PROVIDE INFORMATION ON THE A   | MST DECENT TESTS IF AN                              | V IN WHICH TH                           | IE RESINTS ARE I                        | ISEN EAB                                |
| PURPOSES OF THE DETERMINATI<br>DATE, TEST METHOD USED, TEST  | ON OF FEES, RULE APPLICA                            | BILITY OR COI                           | APLIANCE. INCLU                         | DE THE TEST                             |
| SUMMARY OF RESULTS. IF ADDIT   |   |   |   |   |
| TEST DATE TEST METHOD  | TESTING COMPANY                                     | OPERATIN<br>CONDITIO                    |   | RY OF RESULTS                           |
| 1/21/03  | Kremer Env.   | Normal                                  | *************************************** | efficiency                              |
| ***************************************  | 5 45 C0 8 8 5 C0 1 C0 | * * *********************************** | XX                                      | 2000 000 000 000 000 000 000 000 000 00 |
|  |   |   |   | *************************************** |
|  |   | *************************************** |   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  |
|  |   |   |   |   |
| 36) DESCRIBE ALL REPORTING REQU  | IREMENTS AND PROVIDE TH                             | IE TITLE AND F                          | REQUENCY OF RI                          | EPORT                                   |
| SUBMITTALS TO THE AGENCY:  |   |   |   |   |
| REPORTING REQUIREMENTS   | TITLE OF REPOR                                      |   | FREOU                                   | incy                                    |
| Annual emissions report  | Annual emissions re                                 | port                                    | annuai                                  |   |
| Excess emissions   | Excess emissions                                    |   | semi-annual                             |   |
|  |   |   |   |   |
| 5  | X   |   | *************************************** | ······································  |

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|                             |           |                             |                               |                              | (37)                                    | EMISSION        | INFORMAT          | 70N      |   |                                      |       |                 |                               |  |
|-----------------------------|-----------|-----------------------------|-------------------------------|------------------------------|---|-----------------|-------------------|----------|---|--------------------------------------|-------|-----------------|-------------------------------|--|
|                             |           | (                           | D'actual em<br>D'uncontro     | ISSION RATE<br>LLED EMISSIOI | i rate                                  |                 | ALLOW             | /ABLE BY | RULE EMISS                              | <sup>2</sup> PERMITTED EMISSION RATE |       |                 |                               |  |
| REGULATED AIR<br>POLLUTANT  | •         | LBS PER<br>HOUR<br>(LBS/HR) | TONS PER<br>YEAR<br>(TONS/YR) | <sup>3</sup> OTHER<br>TERMS  | <sup>3</sup> OTHER<br>TERMS             | <sup>4</sup> DM | 5 <sub>RATE</sub> | (UNITS)  | APPLICABLE<br>RULES                     | TONS PER<br>YEAR<br>(TONS/YR)        | RATE  | (UNITS)         | TONS PER<br>YEAR<br>(TONS/YR) |  |
| CARBON                      | MAXIMUM:  |                             |                               |                              |   |                 |                   |          |   |                                      |       |                 |                               |  |
| MONOXIDE (CO)               | TYPICAL:  |                             |                               |                              |   |                 |                   |          |   |                                      |       |                 |                               |  |
| LEAD                        | MAXIMUM:  |                             |                               |                              | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                 |                   |          |   |                                      |       |                 |                               |  |
|                             | TYPICAL   |                             |                               |                              |   |                 |                   | ( )      |   |                                      |       |                 |                               |  |
| NITROGEN                    | MAXIMUM:  |                             |                               |                              |   |                 |                   | ( )      |   |                                      |       |                 |                               |  |
| OXIDES (NOx)                | TYPICAL:  |                             |                               |                              |   |                 |                   | ( )      |   |                                      |       |                 |                               |  |
| PARTICULATE                 | MAXIMUM:  |                             |                               |                              |   |                 |                   | ( )      |   |                                      |       |                 |                               |  |
| MATTER (PART)               | TYPICAL:  |                             | 0000                          |                              |   |                 |                   | ( )      |   |                                      |       |                 |                               |  |
| PARTICULATE<br>MATTER <= 10 | Maximijm; |                             |                               |                              |   |                 |                   | ( )      |   |                                      |       |                 |                               |  |
| MICROMETERS<br>(PM10)       | TYPICAL:  |                             |                               |                              |   |                 |                   | ( )      | *************************************** |                                      |       |                 |                               |  |
| SULFUR                      | MAXIMUM:  |                             |                               |                              |   |                 |                   | ( )      |   |                                      |       | 99 <sub>1</sub> |                               |  |
| DIOXIDE (SO2)               | TYPICAL:  |                             |                               |                              |   |                 |                   | ( )      |   |                                      |       |                 |                               |  |
| VOLATILE<br>ORGANIC         | MAXIMUM:  |                             |                               |                              |   |                 |                   | ( )      |   |                                      |       |                 |                               |  |
| MATERIAL (VOM)              | TYPICAL   |                             |                               |                              |   |                 |                   | ( )      |   |                                      |       |                 |                               |  |
| OTHER,<br>SPECIFY:          | MAXIM:JM: | See Ex.                     | 220-3                         |                              |   |                 |                   | ( )      |   |                                      |       |                 |                               |  |
|                             | TYPICAL:  |                             |                               |                              | *************************************** |                 |                   |          |   |                                      |       |                 |                               |  |
| EXAMPLE:<br>PARTICULATE     | MAXIMUM:  | 5.00                        | 21.9                          | 0.3<br>GR/DSCF               | *************************************** | 1               | 6.0 (LB           | S/HR)    | 212.321                                 | 26.28                                | 5.5 ( | 8S/HR           | 22                            |  |
| MATTER                      | TYPICAL   | 4.00                        | 14.4                          | 0.24<br>GR/DSCF              |   | 4               | 5.5 (LB           | SHR)     | 212.321                                 | 19.80                                |       |                 |                               |  |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

<sup>1</sup> CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.

PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.
PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)
DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS). 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS). <sup>S</sup>RATE • ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

|                        |                            | (3.                  | 8) HAZARDOUS                   | AIR POLLUTAN                    | IT EMISSION II              | NFORMATION      | 1   |   |
|------------------------|----------------------------|----------------------|--------------------------------|---------------------------------|-----------------------------|-----------------|---|---|
|                        |                            | 000000               | O 1ACTU<br>O 1UNCC             | AL EMISSION RA<br>NTROLLED EMIS | ALLOWABLE BY RULE           |                 |   |   |
| NAME OF HAP<br>EMITTED | <sup>2</sup> CAS<br>NUMBER |                      | POUNDS PER<br>HOUR<br>(LBS/HR) | TONS PER<br>YEAR<br>(TONS/YR)   | <sup>3</sup> OTHER<br>TERMS | <sup>4</sup> рм | <sup>5</sup> RATE OR STANDARD                 | APPLICABLE<br>RULE                      |
| Ethylene Oxide         | 75-21-8                    | MAXIMUM:<br>TYPICAL  | See Exhibit                    | 220-a                           |                             |                 |   | 800000000000000000000000000000000000000 |
| Propylene Oxide        | 75-56-9                    | MAXIMUM:             | See Exhibit                    | 220-а                           |                             |                 |   |   |
|                        |                            | MAXIMUM:             |                                |                                 |                             |                 |   |   |
|                        |                            | TYPICAL              |                                |                                 |                             |                 |   |   |
|                        |                            | MAXIMUM:<br>TYPICAL: | <u></u>                        |                                 |                             |                 |   | 000hannanian                            |
|                        |                            | MAXIMUM:             |                                |                                 |                             |                 |   |   |
|                        |                            | TYPICAL:<br>MAXIMUM: |                                |                                 |                             |                 |   |   |
|                        |                            | TYPICAL.             |                                |                                 |                             |                 |   | 000000000000000000000000000000000000000 |
|                        |                            | MAXIMUM:<br>TYPICAL: |                                |                                 |                             |                 |   |   |
|                        |                            | MAXIMUM              |                                |                                 |                             |                 |   |   |
|                        |                            | TYPICAL.             |                                |                                 | <u> </u>                    |                 |   |   |
| EXAMPLE:<br>Benzene    | 71432                      | MAXIMUM:<br>TYPYCAL: | 10.0<br>8.0                    | 1.2<br>0.8                      |                             | 2 2             | 98% by wt control device<br>leak-tight trucks | CFR 61<br>61.302(b).(d)                 |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY. <sup>2</sup>CAS - CHEMICAL ABSTRACT SERVICE NUMBER.

PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).

OM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS). FRATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

| EXHAUST POINT INFORMATION  |  |  |                            |  |  |  |  |  |  |  |
|--|--|--|----------------------------|--|--|--|--|--|--|--|
| THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.   |  |  |                            |  |  |  |  |  |  |  |
| 39) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:   |  |  |                            |  |  |  |  |  |  |  |
| WB1 Scrubber #2 with dry bed   |  |  |                            |  |  |  |  |  |  |  |
| 40) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS. |  |  |                            |  |  |  |  |  |  |  |
| Outside Stack  |  |  |                            |  |  |  |  |  |  |  |
| 41) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):  |  |  |                            |  |  |  |  |  |  |  |
| approx 20 feet   |  |  |                            |  |  |  |  |  |  |  |
| 42) DISCHARGE HEIGHT ABOVE GRADE   | : (FT):                                |  |                            |  |  |  |  |  |  |  |
| approx 30 feet   |  |  |                            |  |  |  |  |  |  |  |
| 43) GOOD ENGINEERING PRACTICE (GI  | EP) HEIGHT, IF KNI                     | OWN (FT):                                |                            |  |  |  |  |  |  |  |
| Unknown  |  |  |                            |  |  |  |  |  |  |  |
| 44) DIAMETER OF EXHAUST POINT (FT)<br>1.128 TIMES THE SQUARE ROOT OF   | n ngn s ann i a ann ann a              | ON CIRCULAR EXHAL<br>inches              | IST POINT, THE DIAMETER IS |  |  |  |  |  |  |  |
| 45) EXIT GAS FLOW RATE   | a) MAXIMUM (ACI                        | FN);                                     | b) TYPICAL (ACFM):         |  |  |  |  |  |  |  |
|  | 15                                     | 5,500                                    | 15,500                     |  |  |  |  |  |  |  |
| 46) EXIT GAS TEMPERATURE   | a) MAXIMUM (°F):                       |  | b) TYPICAL (°F):           |  |  |  |  |  |  |  |
|  | app                                    | rox 75                                   | approx 75                  |  |  |  |  |  |  |  |
| 47) DIRECTION OF EXHAUST (VERTICAL   | L, LATERAL, DOWN                       | (WARD):                                  |                            |  |  |  |  |  |  |  |
| Vertical   |  |  |                            |  |  |  |  |  |  |  |
| 48) LIST ALL EMISSION UNITS AND COM  | ITROL DEVICES SI                       | RVED BY THIS EXH                         | UST POINT:                 |  |  |  |  |  |  |  |
| NAME   |  | FLO                                      | W DIAGRAM DESIGNATION      |  |  |  |  |  |  |  |
| <sup>a)</sup> Aeration Rooms (current)   |  | AR                                       |                            |  |  |  |  |  |  |  |
| <sup>b)</sup> Sterilizer Backvent SC1, SC2   | , SC3, SC4                             | Backvent                                 |                            |  |  |  |  |  |  |  |
| c) Backup for Sterlizer Chamber  | s SC1-4                                | vacuum pump                              |                            |  |  |  |  |  |  |  |
| d)   |  | ***************************************  |                            |  |  |  |  |  |  |  |
| 8)   |  |  |                            |  |  |  |  |  |  |  |
|  |  |  |                            |  |  |  |  |  |  |  |
| THE FOLLOWING INFORMATION NEED ONLY I  | SE SUPPLIED IF REAL                    | VACCATATATATATATATATATATATATATATATATATAT |                            |  |  |  |  |  |  |  |
| 49a) LATITUDE:   |  | b) LONGITUDE:                            |                            |  |  |  |  |  |  |  |
|  | ************************************** | <u></u>                                  |                            |  |  |  |  |  |  |  |
| 50) UTM ZONE:  | b) UTM VERTICAL                        | _ (KM):                                  | c) UTM HORIZONTAL (KM):    |  |  |  |  |  |  |  |
| •  |  |  |                            |  |  |  |  |  |  |  |

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#### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION P.O. BOX 19506 SPRINGFIELD, ILLINOIS 62794-9506

| <u>FOR APPLICANT'S USE</u>             |
|--|
| Revision #:                            |
| Date://                                |
| Page of                                |
| Source Designation:                    |
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|   | Jource Designation.  |  |  |  |  |  |
|---|--|--|--|--|--|--|
|   | FOR AGENCY USE ONLY  |  |  |  |  |  |
| PROCESS EMISSION UNIT   | ID NUMBER:   |  |  |  |  |  |
| DATA AND INFORMATION  | EMISSION POINT #:  |  |  |  |  |  |
|   | DATE:  |  |  |  |  |  |
| SOURCE IN   | FORMATION  |  |  |  |  |  |
| 1) SOURCE NAME:   | 2 93 51016.1 5 5 90 1 8  |  |  |  |  |  |
| Sterigenics US, LLC   |  |  |  |  |  |  |
| 2) DATE FORM<br>PREPARED: 30 May 2018   | 3) SOURCE ID NO.<br>(IF KNOWN): 043110AAC  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  | <u>IFORMATION</u>  |  |  |  |  |  |
| NAME OF EMISSION UNIT:     (1) Ethylene Oxide/Propylene oxide Sterilization         | Chambers (1 pallet capacity) SC-5  |  |  |  |  |  |
| 5) NAME OF PROCESS: Sterilization of medical products and spices                    |  |  |  |  |  |  |
| 6) DESCRIPTION OF PROCESS:  |  |  |  |  |  |  |
| Chemical Sterilization  |  |  |  |  |  |  |
| 7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR A                                    | CTIVITY ACCOMPLISHED:  |  |  |  |  |  |
| Sterilized Medical Supplies and Treated Spices                                      |  |  |  |  |  |  |
| 8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT:                                       |  |  |  |  |  |  |
| Sterilizer Chambers   |  |  |  |  |  |  |
| 9) MANUFACTURER OF EMISSION UNIT (IF KNOWN):  |  |  |  |  |  |  |
| Unknown   |  |  |  |  |  |  |
| 10) MODEL NUMBER (IF KNOWN):  | 11) SERIAL NUMBER (IF KNOWN):  |  |  |  |  |  |
| unknown   | unknown  |  |  |  |  |  |
| 12) DATES OF COMMENCING CONSTRUCTION.   | a) CONSTRUCTION (MONTH/YEAR):  |  |  |  |  |  |
| OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED) | June 1984  |  |  |  |  |  |
| ,   | b) OPERATION (MONTH/YEAR):   |  |  |  |  |  |
|   | May 1985   |  |  |  |  |  |
|   | c) LATEST MODIFICATION (MONTH/YEAR):   |  |  |  |  |  |
|   | November 1990  |  |  |  |  |  |
| 13) DESCRIPTION OF MODIFICATION (IF APPLICABLE):                                    |  |  |  |  |  |  |
| The sterilization chambers includes the chamber v                                   | The state of the s |  |  |  |  |  |
| vent (backvent) as one emission unit. The chambi                                    | er exnaust vent currently exhausts uncontrolled to   |  |  |  |  |  |

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1038.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

atmosphere. This modification proposes to control the backvent with scrubber #2 and dry bed reactor.

APPLICATION PAGE <u>박</u>

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FOR APPLICANT'S USE

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| 14) DOES THE EMISSION UNIT HA  | VE MO                                  | RE THAN ON  | E MOD  | E OF C                                  | PERATIO  | N7                              |  | 7                | YES       | O NO                                   |  |
|--|--|---|--|---|--|---------------------------------|--|------------------|-----------|--|--|
| IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE:<br>A SEPARATE PROCESS EMISSION UNIT FORM 220-CAAPP MUST BE COMPLETED<br>FOR EACH MODE):   |  |   |  |   |  |                                 |  |                  |           |  |  |
| The sterilization chambers incl  | udes                                   | the chambe  | er veni  | t (via                                  | vacuum   | pun                             | np) and the  | e cha            | amber     | · exhaust                              |  |
| vent (backvent) as one emission unit. The chamber backvent modification is covered by this form. The   |  |   |  |   |  |                                 |  |                  |           |  |  |
| chamber vent is controlled by WB1 Acid Scrubber 1 and remains unchanged.   |  |   |  |   |  |                                 |  |                  |           |  |  |
| 15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 280-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT): |  |   |  |   |  |                                 |  |                  |           |  |  |
| The chamber backvent is currently uncontrolled. This application proposes to duct the chamber  |  |   |  |   |  |                                 |  |                  |           |  |  |
| exhaust vent (backvent) to the   | exist                                  | ing Acid Sci  | rubbei   | r (scru                                 | ibber #2   | ) Wi                            | th Dry Bed   | Rea              | actor.    | The                                    |  |
| information provided below is a  | requir                                 | ed for the e  | xisting  | i cont                                  | rol devic  | e.                              |  |                  |           |  |  |
| 16) WILL EMISSIONS DURING STA<br>RATE PURSUANT TO A SPECIF<br>ESTABLISHED BY AN EXISTING   | ic Ru                                  | LE, OR THE A  | WLOW/  | able e                                  | MISSION  |                                 |  | O                | YES       | Ø 100                                  |  |
| IF YES, COMPLETE AND ATTAC<br>EXCESS EMISSIONS DURING S  |  |   |  |   | TO OPE   | RAT                             | E WITH   |                  |           |  |  |
| 17) PROVIDE ANY LIMITATIONS OF   |  |   |  |   | NG EMISS   | STOF                            | IS OR ANY V  | VORI             | ( PRAC    | TICE                                   |  |
| STANDARDS (E.G., ONLY ONE<br>Monthly usage limitations for p   |  |   |  |   | nvirla sl  | hall                            | nni evree:   | 128              | NN nni    | unds and                               |  |
| 70,000 pounds respectively for   | , ~                                    |   |  | •                                       |  | , pages ye                      | 22000 10511010010                                    | ~ ~~~            | www.gw.as | and coverant agers 9 are               |  |
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|  |  |   |  |   |  |                                 |  |                  |           |  |  |
| OPERATING INFORMATION  |  |   |  |   |  |                                 |  |                  |           |  |  |
| 40) ATTARUTUE PALRIS ATIRISE   | ************************************** |   |  |   | 000000000000000000000000000000000000000  | *******                         | ······································               |                  |           |  |  |
| 18) ATTACH THE CALCULATIONS,<br>FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT   | RMAT                                   | E EXTENT TH<br>ION, MATERIA   | iey ar<br>Al Usa                                   | E AIR<br>GE IN                          | EMISSION<br>FORMATIK   | i RE<br>On /                    | AND FUEL U   | Sage             |           |  |  |
| FOLLOWING OPERATING INFO   | RMAT<br>220-1                          | E EXTENT TH<br>ION, MATERIA   | iey ar<br>al USA<br>speci/                         | E AIR<br>GE IN                          | EMISSION<br>FORMATIK   | i RE<br>ON /<br>DRM             | AND FUEL US<br>202-CAAPP                             | SAGE             |           | WERE                                   |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT   | RMAT<br>220-1                          | E EXTENT TH<br>ION, MATERIA<br>REFER TO   | iey ar<br>al usa<br>speci/                         | E AIR<br>GE IN                          | EMISSION<br>FORMATIK<br>ES OF FO   | i RE<br>ON /<br>DRM             | ND FUEL U:<br>202-CAAPP<br>(:                        | SAGE             | E DATA    | WERE                                   |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR  | RMAT<br>220-1<br>S                     | E EXTENT TH<br>ION, MATERIA<br>REFER TO S<br>HOURS/DAY  | iey ar<br>Al Usa<br>Speci/<br>/:                   | E AIR<br>GE IN                          | EMISSION<br>FORMATIK<br>ES OF FO   | I RE<br>ON /<br>ORM<br>ŒEH<br>7 | AND FUEL U:<br>202-CAAPP                             | SAGE             | E DATA    | WERE EAR: 52                           |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year   | RMAT<br>220-1<br>S                     | E EXTENT TH<br>ION, MATERI/<br>REFER TO :<br>HOURS/DAY<br>24  | IEY AR<br>AL USA<br>SPECI/<br>7:<br>4              | E AIR<br>GE IN                          | EMISSION<br>FORMATIK<br>TES OF FO<br>DAYS/W  | I RE<br>ON /<br>ORM<br>ŒEH<br>7 | AND FUEL U:<br>202-CAAPP                             | SAGE             | EDATA     | WERE EAR: 52                           |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS   | RMAT<br>220-1<br>S                     | E EXTENT TH<br>ION, MATERIA<br>PEFER TO :<br>HOURS/DAY<br>24<br>HOURS/DAY   | iey ar<br>al Usa<br>speci/<br>/<br>4<br>/<br>4     | E AIR<br>GE IN<br>N. NOT                | EMISSION<br>FORMATIK<br>TES OF FO<br>DAYS/W  | I RE<br>ON /<br>ORM<br>ŒEH<br>7 | AND FUEL U:<br>202-CAAPP                             | SAGE<br>WE       | E DATA    | EAR:<br>52<br>EAR:                     |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT<br>220-1<br>S                     | E EXTENT TH<br>ION, MATERIA<br>REFER TO :<br>HOURS/DAY<br>HOURS/DAY   | iey ar<br>al Usa<br>speci/<br>/<br>4<br>/<br>4     | E AIR<br>GE IN<br>N. NOT                | EMISSION<br>FORMATIK<br>ES OF FO<br>DAYS/W<br>DAYS/W                                 | I RE<br>ON /<br>ORM<br>ŒEH<br>7 | AND FUEL US<br>202-CAAPP<br>C                        | SAGE<br>WE       | E DATA    | EAR: 52 52                             |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT 220-1                             | E EXTENT THOM, MATERIA<br>PREFER TO:<br>HOURS/DAY<br>HOURS/DAY<br>24<br>DEC-FEB(%   | IEY AR<br>AL USA<br>SPECI/<br>(:<br>4<br>4<br>(.   | E AIR<br>GE IN<br>U. NOT                | EMISSION<br>FORMATIK<br>ES OF FO<br>DAYS/W<br>DAYS/W<br>MAY(%):                      | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP<br>C<br>S<br>JUN-AUG(S<br>25 | SAGE<br>WE       | E DATA    | EAR:<br>52<br>EAR:<br>52<br>EP-NOV(%): |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT 220-1                             | E EXTENT THE CONTROL MATERIAL REFER TO SECURISH TO SECURISH TO SECURISH THE CONTROL MATERIAL REPORTS (SECURISH TO SECURISH TO | IEY AR<br>AL USA<br>SPECI/<br>(:<br>4<br>4<br>(.   | E AIR<br>GE IN<br>U. NOT                | EMISSION<br>FORMATIK<br>ES OF FO<br>DAYS/W<br>DAYS/W<br>MAY(%):                      | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP<br>C<br>S<br>JUN-AUG(S<br>25 | SAGE<br>WE       | E DATA    | EAR:<br>52<br>EAR:<br>52<br>EP-NOV(%): |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT 220-1                             | E EXTENT THOM, MATERIA<br>PREFER TO:<br>HOURS/DAY<br>HOURS/DAY<br>24<br>DEC-FEB(%   | IEY AR<br>AL USA<br>SPECI/<br>(:<br>4<br>4<br>(.   | E AIR<br>GE IN<br>U. NOT                | EMISSION<br>FORMATIK<br>ES OF FO<br>DAYS/W<br>DAYS/W<br>MAY(%):                      | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP<br>C<br>S<br>JUN-AUG(S<br>25 | SAGE<br>WE       | E DATA    | EAR:<br>52<br>EAR:<br>52<br>EP-NOV(%): |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT 220-1                             | E EXTENT THOM, MATERIA<br>PREFER TO:<br>HOURS/DAY<br>HOURS/DAY<br>24<br>DEC-FEB(%   | IEY AR<br>AL USA<br>SPECIA<br>4<br>4<br>4<br>!SAGI | E AIR<br>GE IN<br>L NOT                 | EMISSION<br>FORMATIK<br>ES OF FO<br>DAYS/W<br>DAYS/W<br>MAY(%):                      | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP<br>C<br>S<br>JUN-AUG(S<br>25 | SAGE<br>WE<br>WE | E DATA    | EAR: 52 EAR: 52 EAR: 25                |  |
| FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT<br>19a) MAXIMUM OPERATING HOUR<br>8760 per year<br>b) TYPICAL OPERATING HOURS<br>8600 per year  | RMAT 220-1                             | E EXTENT THE CONTROL MATERIAL PROPERTY OF CONTROL OF CO  | IEY AR<br>AL USA<br>SPECIA<br>4<br>4<br>1<br>ISAGA | E AIR<br>GE IN<br>L NOT                 | EMISSION<br>FORMATK<br>ES OF FO<br>DAYS/W<br>DAYS/W<br>MAY(%):<br>25                 | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP<br>C<br>S<br>JUN-AUG(S<br>25 | SAGE<br>WE<br>WE | EDATA     | EAR: 52 EAR: 52 EAR: 25                |  |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT 19a) MAXIMUM OPERATING HOUR 8760 per year   b) TYPICAL OPERATING HOURS 8600 per year   20) ANNUAL THROUGHPUT   | RMAT 220-1                             | E EXTENT THON, MATERIA REFER TO: HOURS/DAY 24 HOURS/DAY 25 DEC-FER(% 25   | IEY AR<br>AL USA<br>SPECIA<br>4<br>4<br>1<br>ISAGA | E AIR<br>GE IN<br>L NOT<br>MAR<br>E INF | EMISSION<br>FORMATK<br>ES OF FO<br>DAYS/W<br>DAYS/W<br>MAY(%):<br>25                 | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP                              | SAGE<br>WE<br>WE | EDATA     | EAR: 52 EAR: 52 P-NOV(%): 25           |  |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT 19a) MAXIMUM OPERATING HOUR 8760 per year 8600 per year 20) ANNUAL THROUGHPUT  | RMAT 220-1                             | E EXTENT THON, MATERIA REFER TO: HOURS/DAY 24 HOURS/DAY 25 DEC-FER(% 25   | IEY AR<br>AL USA<br>SPECIA<br>4<br>4<br>1<br>ISAGA | E AIR<br>GE IN<br>L NOT<br>MAR<br>E INF | EMISSION<br>FORMATION<br>ES OF FO<br>DAYS/W<br>MAY(%):<br>25<br>DRMAT/<br>EAR<br>420 | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP                              | SAGE<br>WE<br>WE | EDATA     | EAR: 52 EAR: 52 P-NOV(%): 25           |  |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT 19a) MAXIMUM OPERATING HOUR 8760 per year   b) TYPICAL OPERATING HOURS 8600 per year   20) ANNUAL THROUGHPUT   | RMAT 220-1                             | E EXTENT THON, MATERIA REFER TO: HOURS/DAY 24 HOURS/DAY 25 DEC-FER(% 25   | IEY AR<br>AL USA<br>SPECIA<br>4<br>4<br>1<br>ISAGA | E AIR<br>GE IN<br>L NOT<br>MAR<br>E INF | EMISSION FORMATIK ES OF FO DAYS/W  MAY(%): 25  DRMATI                                | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP                              | SAGE<br>WE<br>WE | EDATA     | EAR: 52 EAR: 52 P-NOV(%): 25           |  |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT 19a) MAXIMUM OPERATING HOUR 8760 per year 8600 per year 20) ANNUAL THROUGHPUT  | RMAT 220-1                             | E EXTENT THON, MATERIA REFER TO: HOURS/DAY 24 HOURS/DAY 25 DEC-FER(% 25   | IEY AR<br>AL USA<br>SPECIA<br>4<br>4<br>1<br>ISAGA | E AIR<br>GE IN<br>L NOT<br>MAR<br>E INF | EMISSION<br>FORMATION<br>ES OF FO<br>DAYS/W<br>MAY(%):<br>25<br>DRMAT/<br>EAR<br>420 | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP                              | SAGE<br>WE<br>WE | EDATA     | EAR: 52 EAR: 52 P-NOV(%): 25           |  |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT 19a) MAXIMUM OPERATING HOUR 8760 per year 8600 per year 20) ANNUAL THROUGHPUT  | RMAT 220-1                             | E EXTENT THON, MATERIA REFER TO: HOURS/DAY 24 HOURS/DAY 25 DEC-FER(% 25   | IEY AR<br>AL USA<br>SPECIA<br>4<br>4<br>1<br>ISAGA | E AIR<br>GE IN<br>L NOT<br>MAR<br>E INF | EMISSION<br>FORMATION<br>ES OF FO<br>DAYS/W<br>MAY(%):<br>25<br>DRMAT/<br>EAR<br>420 | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP                              | SAGE<br>WE<br>WE | EDATA     | EAR: 52 EAR: 52 P-NOV(%): 25           |  |
| FOLLOWING OPERATING INFO BASED AND LABEL AS EXHIBIT 19a) MAXIMUM OPERATING HOUR 8760 per year 8600 per year 20) ANNUAL THROUGHPUT  | RMAT 220-1                             | E EXTENT THON, MATERIA REFER TO: HOURS/DAY 24 HOURS/DAY 25 DEC-FER(% 25   | IEY AR<br>AL USA<br>SPECIA<br>4<br>4<br>1<br>ISAGA | E AIR<br>GE IN<br>L NOT<br>MAR<br>E INF | EMISSION<br>FORMATION<br>ES OF FO<br>DAYS/W<br>MAY(%):<br>25<br>DRMAT/<br>EAR<br>420 | VRE<br>ON /<br>ORM<br>YEEP<br>7 | ND FUEL US<br>202-CAAPP                              | SAGE<br>WE<br>WE | EDATA     | EAR: 52 EAR: 52 P-NOV(%): 25           |  |

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|---|---|---|---|--|---|--|--|
| ſ   | WAX                                     | IMUM R                                  | ATES                                    | TYPIC  | AL RATES                                |  |  |
| 21b) PRODUCTS   | LBS/HR                                  |   | TONS/YEAR                               | LBS/HR   | TONS/YEAR                               |  |  |
| N/A   | 00000000000000000000000000000000000000  |   |   |  |   |  |  |
|   | Di                                      | 7 r                                     |   | , acceptance   |   |  |  |
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|   | 000000000000000000000000000000000000000 |   |   | 22555565656666666666666666666666666666               |   |  |  |
|   | MAXI                                    | MUM R                                   | ATES                                    | TYPIC  | AL RATES                                |  |  |
| 21c) BY-PRODUCT MATERIALS                               | LBS/HR                                  | 000000000000000000000000000000000000000 | TONS/YEAR                               | LBS/HR   | TONS/YEAR                               |  |  |
| NA  | 990aaaaaggggggggggggggggggggggggggggggg |   |   | 000000000000000000000000000000000000000              | 000000000000000000000000000000000000000 |  |  |
| ***************************************                 | 00/300000000000000000000000000000000000 |   | *************************************** | 000000000000000000000000000000000000000              | 000000000000000000000000000000000000000 |  |  |
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|   | 799 <sup>000</sup>                      |   | *************************************** |  | \$0000000000000000000000000000000000000 |  |  |
|   |   |   | *************************************** |  |   |  |  |
| 22a) MAXIMUM FIRING RATE                                | <i>FU</i><br>b) TYPICA                  | nnnnn0000000000000000                   | A <i>GE DATA</i><br>C: Pate             | c) DESIGN CAPA                                       | rity eiding                             |  |  |
| (MILLION BTU/HR):                                       |   | NUTB NC                                 | HR):                                    | RATE (MILLIO   | N BTU/HR):                              |  |  |
| N/A   |   | N//                                     | 'A N/A                                  |  |   |  |  |
| d) FUEL TYPE:   |   |   | Avvvvv                                  |  |   |  |  |
| ONATURAL GAS OFUE                                       | L OIL: GRADE N                          | UMBER                                   |   | OAL OOTHER_  | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  |  |  |
| IF MORE THAN ONE FUEL IS U                              |   |   |   |  |   |  |  |
| e) TYPICAL HEAT CONTENT OF F<br>BTU/GAL OR BTU/SCF):    | UEL (BTU/LB,                            | ~~~~~~~ <u>~~~~~</u>                    | n Typical suli<br>gas):                 | FUR CONTENT (WT 9                                    | 6., NA FOR NATURAL                      |  |  |
|   |   |   |   |  |   |  |  |
| g) TYPICAL ASH CONTENT (WT '<br>GAS):                   | %., NA FOR NAT                          | URAL                                    |   | EL USAGE (SPECIFY<br>SAL/YEAR, TON/YEAR              |   |  |  |
| way.  |   |   | The task is a target of the             | ure reduct it december his is have also a successive | Λ.                                      |  |  |
| 23) ARE COMBUSTION EMISSIONS<br>PROCESS UNIT EMISSIONS? | DUCTED TO TI                            | HE SAM                                  | E STACK OR CON                          | TROL AS  | Dyes Dino                               |  |  |
| IF NO, IDENTIFY THE EXHAUST                             | POINT FOR CO                            | OMBUST                                  | ION EMISSIONS:                          |  |   |  |  |
|   |   |   |   |  |   |  |  |
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|  | APPLICABLE RU  |  |
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| <ul> <li>PROVIDE ANY SPECIFIC EMISSION STANDARD<br/>REGULATED AIR POLLUTANT(S)</li> </ul>    | (S) AND LIMITATION(S) SET BY RULE(S) WHICH A<br>EMISSION STANDARD(S) | RE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.204(j)(4), 3.5 LBS/GAI<br>REQUIREMENT(S) |
| VOM (WB1 Scrubber 2)   | 35 IAC 218.302(b)  | At least 85% recovery of total uncontrolled org. mat.  |
| HAP (WB1 Scrubber 2)   | 40CFR 63.362   | 99% reduction or 1 ppm outlet  |
| ) PROVIDE ANY SPECIFIC RECORDKEEPING RUI<br>REGULATED AIR POLLUTANT(S)                       | LE(S) WHICH ARE APPLICABLE TO THIS EMISSION RECORDICEPING RULE(S)    | N UNIT:  REQUIREMENT(5)  |
| Standards don't apply to backvent  | 40 CFR 63.10   | MACT recordkeeping and reporting   |
| but do apply to WB1 Scrubber 2   |  |  |
| REGULATED AIR POLLUTANT(S)  Standards don't apply to backvent but do apply to WB1 Scrubber 2 | REPORTING RULE(S) 40 CFR 63.10                                       | MACT recordkeeping and reporting   |
| • •  | WHICH ARE APPLICABLE TO THIS EMISSION UN                             |  |
| REGULATED AIR POLLUTANT(S)   | MONITORING RULE(S)   | REQUIREMENT(S)   |
| HAP monitoring applies to  | 40CFR 63.364   | Weekly Scrubber liquor level   |
| W81 Scrubber 2 and dry beds  | 40CFR 63.364   | Weekly EO concentration from dry beds  |
| PROVIDE ANY SPECIFIC TESTING RULES AND/  | OR PROCEDURES WHICH ARE APPLICABLE TO T                              | THIS EMISSION UNIT:  REQUIREMENT(S)  |
| HAP applies to WB1 Scrubber 2  | 40 CFR63.365   | Testing of control equipment   |
|  |  |  |
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|--|--|---|---|---|--|
| 29) DOES THE EMISSION UP<br>OTHERWISE APPLICABL  |  | PTION FROM AN                           | O YES                                   | Ø NO                                    |  |
| IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 220-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION.  |  |   |   |   |  |
| damman, p. 6.0000000000000000000000000000000000  |  |   | *************************************** |   |  |
|  | COMPLIAN   | CE INFORMATION                          |   |   |  |
| 30) IS THE EMISSION UNIT I<br>REQUIREMENTS?  | N COMPLIANCE WITH ALL A                              | NPPLICABLE                              | Ø yes                                   | O NO                                    |  |
|  | CAAPP "COMPLIANCE PLAN<br>UNITS" MUST BE COMPLETI    |   |   |   |  |
| 31) EXPLANATION OF HOW   | INITIAL COMPLIANCE IS TO                             | BE, OR WAS PREVIOUSLY,                  | , DEMONSTRATED                          |   |  |
| Ethylene Oxide and Pro<br>WB Scrubber 2 was les  | opylene oxide usage is tr<br>sted January 23, 2003   | racked monthly.                         |   |   |  |
| * 6 20. 10.01 10.00 10.00  | er anne maner amount & der der & and as an an        |   |   |   |  |
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| 32) EXPLANATION OF HOW   | ONGOING COMPLIANCE WI                                | LL BE DEMONSTRATED:                     |   |   |  |
| Records of Ethylene Ox   | ide (EO) and Propylene                               | Oxide (PO) usage, (mo                   | nthlv)                                  |   |  |
| *  |  |   | -                                       |   |  |
| WB1 Scrubber 2 is required to monitor scrubber liquor level weekly, pH weekly.  EO concentration is checked weekly to determine proper operation of the Dry Bed Unit.  |  |   |   |   |  |
| and the second of the second second seconds to the second section of the second |  |   |   |   |  |
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| ***************************************  | ING, MONITORING, RE                                  |   | VVVVVVVVVVVVVXXXXXXXXXXXXXXXXXXXXXXXXX  |   |  |
| 33a) LIST THE PARAMETER:   | S THAT RELATE TO AIR EMI<br>LE APPLICABILITY OR COMP |   |   |   |  |
|  | LE APPLICABILITY OR COMP<br>MENT, AND THE FREQUEN    |   |   |   |  |
|  |  | V                                       | •                                       | ,                                       |  |
| PARAMETER  | UNIT OF MEASUREMENT                                  | METHOD OF MEASUREM                      | ENT FRE                                 | QUENCY                                  |  |
| Sterilant Usage  | pounds   | Operating data                          | monthly                                 | /                                       |  |
| Liquor level   | inches   | Operating data                          | weekly                                  |   |  |
| EO conc  | ppm  | GLC from dry bed                        | weekly                                  | *************************************** |  |
| 000000   | ***************************************              |   |   |   |  |
|  |  |   |   |   |  |
|  |  |   |   |   |  |

| RECORDED PARAMET  | ER INCLUDE THE METHOD                          | CORDS WILL BE CREATED AND M.<br>OF RECORDKEEPING, TITLE OF P<br>INTACT FOR REVIEW OF RECORD                    | ERSON RESPONSIBLE FOR                   |
|---|--|--|---|
| recondreering, and<br>Parameter                                   | METHOD OF RECORDKEEPING                        | TITLE OF PERSON RESPONSIBLE  | TITLE OF CONTACT PERSON                 |
| Sterilant usage   | Operating report                               | General Manager  | EH&S                                    |
| Liquor Level  | PM records                                     | General Manager  | EH&S                                    |
| EO conc   | PM Records                                     | General Manager  | EH&S                                    |
|   |  | ***************************************  | *************************************** |
|   |  |  | *************************************** |
|   | **************************************         |  |   |
| THE RECORDS?  | CIMIDOIUN DINI REPUICT L                       | DEMONSTRATED BY REVIEW OF  | 🛭 YES 🔾 NO                              |
| IF NO, EXPLAIN:   |  |  |   |
|   |  |  |   |
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| J. D. D. D. D. D. S. S. S. D. | 223  | ም ያንያን ያለት ነገር ነው ነ | 7                                       |
| SUBMITTAL TO THE AGE  | DILY AVAILABLÉ FOR INSPI<br>ENCY UPON REQUEST? | cuinn, curting and   | 🛭 YES 🗀 NO                              |
| IF NO, EXPLAIN:   |  |  |   |
|   |  |  |   |
|   |  |  |   |
|   |  |  |   |
|   |  |  |   |
| 34a) DESCRIBE ANY MONITO<br>COMPLIANCE:                           | ORS OR MONITORING ACTI                         | VITIES USED TO DETERMINE FEE!  | S, RULE APPLICABILITY OR                |
| Monitor and record the k  |  |  |   |
| Monitor the EtO concent   | ration entering and exitir                     | ng the AATDry Beds.  |   |
|   |  |  |   |
| b) WHAT PARAMETER(S) IS   | S(ARE) BEING MONITORED                         | E.G., VOM EMISSIONS TO ATMOS   | PHERE)?                                 |
| Level of scrubber liquor.   |  |  |   |
| EtO levels from the AAT   | Dry Beds.                                      |  |   |
|   |  |  |   |
|   |  |  |   |
| c) DESCRIBE THE LOCATIO   | ON OF EACH MONITOR (E.G.                       | . IN STACK MONITOR 3 FEET FRO  | M EXIT):                                |
|   |  |  |   |
|   |  |  |   |
|   |  |  |   |
|   |  |  |   |

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| 34d) IS EACH M                          | ONITOR EQUIPPED V                       | VITH A RECORDING DEVICE                           | ?                                       | ***************************************      | O YES                                   | O NO                                    |
|---|---|---|---|--|---|---|
| IF NO, LIST AL                          | L MONITORS WITHO                        | OUT A RECORDING DEVICE:                           |   |  |   |   |
| N/A                                     |   |   |   |  |   |   |
|   |   |   |   |  |   |   |
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| e) IS EACH MON<br>BASIS?                | ITOR REVIEWED FOR                       | R ACCURACY ON AT LEAST                            | A QUARTERI                              | .Υ   | U YES                                   | U NO                                    |
| IF NO, EXPLAI                           | N:                                      |   |   |  |   |   |
| N/A                                     |   |   |   |  |   |   |
|   |   |   |   |  |   |   |
|   |   |   |   |  |   |   |
|   |   |   |   |  |   |   |
|   |   |   |   |  |   |   |
| f) IS EACH MONI<br>IN OPERATION         |   | ALL TIMES THE ASSOCIATE                           | D EMISSION                              | UNIT IS                                      | O yes                                   | Ø NO                                    |
| IF NO. EXPLAI                           | N-                                      |   |   |  |   |   |
|   | <br>monitoring is requ                  | ired.   |   |  |   |   |
|   | •                                       |   |   |  |   |   |
|   |   |   |   |  |   |   |
|   |   |   |   |  |   |   |
|   |   |   |   |  |   |   |
|   |   | OST RECENT TESTS, IF AN                           |   |  |   |   |
| DATE, TEST N                            | ETHOD USED, TEST                        | ON OF FEES, RULE APPLIC<br>ING COMPANY, OPERATING | CONDITION                               | S EXISTIN                                    | 3 DURING THE T                          |   |
| SUMMARY OF                              | RESULTS. IF ADDIT                       | IONAL SPACE IS NEEDED, /                          |   |  | EXHIBIT 220-4:                          |   |
| TEST DATE                               | TEST METHOD                             | TESTING COMPANY                                   | OPERA<br>CONDIT                         |  | SUMMARY OF                              | RESULTS                                 |
| 1/21/03                                 |   | Kremer Env.                                       | Normal                                  |  | > 99% effici                            | ency                                    |
|   |   |   |   |  |   |   |
| *************************************** | *************************************** | ***************************************           |   |  |   |   |
| *************************************** |   |   |   |  |   | *************************************** |
|   |   |   |   |  | <b></b>                                 |   |
| 36) DESCRIBE ALI                        | . REPORTING REQUI                       | REMENTS AND PROVIDE T                             | E TITLE AND                             | FREQUE                                       | VCY OF REPORT                           | ······································  |
|   | O THE AGENCY:                           |   |   |  |   |   |
| REPORTING                               | REQUIREMENTS                            | TITLE OF REPOR                                    |   | g  | FREQUENCY                               |   |
| Annual emis                             | sions report                            | Annual emissions re                               | port                                    | annua  |   |   |
| Excess emis                             | sions                                   | Excess emissions                                  |   | semi-a                                       | innual                                  |   |
|   |   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,            |   | <b>*************************************</b> | AAAAAAAAAAAAA                           |   |
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|                             | *************************************** |  |                               |                             | (37)                        | em/ssion        | INFORMAT                        | 10N     |                     |                                      |       |         |                               |
|-----------------------------|---|--|-------------------------------|-----------------------------|-----------------------------|-----------------|---------------------------------|---------|---------------------|--------------------------------------|-------|---------|-------------------------------|
|                             |   | O 'actual emission rate<br>O 'uncontrolled emission rate |                               |                             |                             | ALLOW           | ALLOWABLE BY RULE EMISSION RATE |         |                     | <sup>2</sup> PERMITTED EMISSION RATE |       |         |                               |
| REGULATED AIR<br>POLLUTANT  |   | LBS PER<br>HOUR<br>(LBS/HR)                              | YONS PER<br>YEAR<br>(TONS/YR) | <sup>3</sup> OTHER<br>TERMS | <sup>3</sup> OTHER<br>TERMS | <sup>4</sup> DM | SRATE                           | (UNITS) | APPLICABLE<br>RULES | TONS PER<br>YEAR<br>(TONS/YR)        | RATE  | (UNITS) | TONS PER<br>YEAR<br>(TONS/YR) |
| CARBON                      | MAXIMUM.                                |  |                               |                             |                             |                 | 1                               | ( )     |                     |                                      |       |         |                               |
| MONOXIDE (CO)               | TYPICAL:                                |  |                               |                             |                             |                 |                                 | ()      |                     |                                      |       |         |                               |
| LEAD                        | MAXIMUM:                                |  |                               |                             |                             |                 |                                 | ( )     |                     |                                      |       |         |                               |
|                             | TYPICAL                                 |  |                               |                             |                             |                 |                                 | ()      |                     |                                      |       |         |                               |
| NITROGEN                    | MAXIMUM:                                |  |                               |                             |                             |                 |                                 | ( )     |                     |                                      |       |         |                               |
| OXIDES (NOx)                | TYPICAL:                                |  |                               |                             |                             |                 |                                 |         |                     |                                      |       |         |                               |
| PARTICULATE                 | MAXIMUM.                                |  |                               |                             |                             |                 |                                 |         |                     |                                      |       |         |                               |
| MATTER (PART)               | TYPECAL                                 |  |                               |                             |                             |                 |                                 |         |                     |                                      |       |         |                               |
| PARTICULATE<br>MATTER <= 10 | MAXIMUM:                                |  |                               |                             |                             |                 |                                 | ( )     |                     |                                      |       |         |                               |
| MICROMETERS<br>(PM10)       | TYPICAL:                                |  |                               |                             |                             |                 |                                 | ( )     |                     |                                      |       |         |                               |
| SULFUR                      | MAXIMUM:                                |  |                               |                             |                             |                 |                                 | ( )     |                     |                                      |       |         |                               |
| DIOXIDE (SO2)               | TYPECAL:                                |  |                               |                             |                             |                 |                                 |         |                     |                                      |       |         |                               |
| VOLATILE<br>ORGANIC         | MAXIMUM:                                |  |                               |                             |                             |                 |                                 | ( )     |                     |                                      |       |         |                               |
| MATERIAL (VOM)              | TYPICAL:                                |  |                               |                             | _                           |                 |                                 | ( )     |                     |                                      |       |         |                               |
| OTHER,<br>SPECIFY:          | MAXIMUM:                                | See Ex.  | 220-а                         |                             |                             |                 |                                 | ( )     |                     |                                      |       |         |                               |
|                             | TYPICAL                                 |  |                               |                             |                             |                 |                                 | ( )     |                     |                                      |       |         |                               |
| EXAMPLE:<br>PARTICULATE     | MAXIMUM:                                | 5.00   | 21.9                          | 0.3<br>GRÆSCF               |                             | 1               | 6.0 (L8                         | S/HR)   | 212.321             | 25.28                                | 5.5 ( | BS/HR   | 22                            |
| MATTER                      | TYPICAL                                 | 4.00   | 14.4                          | 0.24<br>GR/DSCF             |                             | 4               | 5.5 (LB                         | S/HR)   | 212.321             | 19.80                                |       |         |                               |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS,

PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.

PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM. GR/DSCF, ETC.)

DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)

RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

|                        |                            | (3                   | 8) HAZARDOUS                           | AIR POLLUTAN                     | IT EMISSION II              | VFORMATIC       | ON  |   |
|------------------------|----------------------------|----------------------|--|----------------------------------|-----------------------------|-----------------|---|---|
|                        |                            |                      | O 1actu<br>O 1unco                     | AL EMISSION RA<br>INTROLLED EMIS | ALLOWABLE BY RULE           |                 |   |   |
| NAME OF HAP<br>EMITTED | <sup>2</sup> CAS<br>NUMBER |                      | POUNDS PER<br>HOUR<br>(LBS/HR)         | TONS PER<br>YEAR<br>(TONS/YR)    | <sup>3</sup> OTHER<br>TERMS | <sup>4</sup> 0M | <sup>5</sup> RATE OR STANDARD APPLI<br>RL | CABLE<br>ILE                            |
| Ethylene Oxide         | 75-21-8                    | MAXIMUM:<br>TYPICAL: | See Exhibit                            | 220-a                            |                             |                 |   |   |
| Propylene Oxide        | 75-56-9                    | WAXIMUM<br>TYPICAL:  | See Exhibit                            | 220-a                            |                             |                 |   | •                                       |
|                        |                            | MAXIMUR:<br>TYPICAL  |  |                                  |                             |                 |   | *************************************** |
|                        |                            | MAXIMUM:             |  |                                  |                             |                 |   |   |
|                        |                            | MAXIMUM:<br>TYPICAL  |  |                                  |                             |                 |   | •                                       |
|                        |                            | MAXIMUM              | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | •                                |                             |                 |   |   |
|                        |                            | TYPICAL:<br>MAXIMUM  |  |                                  |                             |                 |   |   |
|                        |                            | TYPICAL:             |  |                                  |                             |                 |   |   |
|                        |                            | TYPICAL              |  |                                  |                             |                 |   |   |
| EXAMPLE:<br>Senzene    | 71432                      | MAXIMUM:<br>TYPICAL: | 10.0<br>8.0                            | 1.2<br>0.8                       |                             | 2 2             | 1 2 "                                     | R 61<br>2(b),(d)                        |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS, CHECK BOX TO SPECIFY. CAS - CHEMICAL ABSTRACT SERVICE NUMBER.

PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).

DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS). STATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

| EXHAUST POINT INFORMATION  |                     |   |   |  |  |  |
|--|---------------------|---|---|--|--|--|
| THIS SECTION SHOULD NOT BE COMPLETED   | IF EMISSIONS ARE I  | EXHAUSTED THROUGH A                     | NR POLLUTION CONTROL EQUIPMENT.         |  |  |  |
| 39) FLOW DIAGRAM DESIGNATION OF I  |                     | ······································  | *************************************** |  |  |  |
| WB1 Scrubber #2 with dry bec   |                     |   |   |  |  |  |
| 40) DESCRIPTION OF EXHAUST POINT (<br>DISCHARGES INDOORS, DO NOT C   |                     |   | PRS, ETC.). IF THE EXHAUST POINT        |  |  |  |
| Outside Stack  |                     |   |   |  |  |  |
| 41) DISTANCE TO NEAREST PLANT BOIL   | INDARY FROM EX      | HAUST POINT DISCH                       | ARGE (FT):                              |  |  |  |
| approx 20 feet   |                     |   |   |  |  |  |
| 42) DISCHARGE HEIGHT ABOVE GRADE   | (FT):               | *************************************** | *************************************** |  |  |  |
| approx 30 feet   |                     |   |   |  |  |  |
| 43) GOOD ENGINEERING PRACTICE (GI  | EP) HEIGHT, IF KN   | OWN (FT):                               |   |  |  |  |
| Unknown  |                     |   |   |  |  |  |
| 44) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA. 24 inches |                     |   |   |  |  |  |
| 45) EXIT GAS FLOW RATE   | a) MAXIMUM (AC      | FM);                                    | b) TYPICAL (ACFM):                      |  |  |  |
|  | 1                   | 5,500                                   | 15,500                                  |  |  |  |
| 46) EXIT GAS TEMPERATURE   | a) MAXIMUM (°F)     |   | b) TYPICAL (*F):                        |  |  |  |
|  | apı                 | 200x 75                                 | approx 75                               |  |  |  |
| 47) DIRECTION OF EXHAUST (VERTICAL Vertical  | ., LATERAL, DOWI    | NWARD):                                 |   |  |  |  |
| 48) LIST ALL EMISSION UNITS AND CON  | TROL DEVICES S      | ERVED BY THIS EXH                       | NUST POINT:                             |  |  |  |
| NAME   |                     | FLO                                     | W DIAGRAM DESIGNATION                   |  |  |  |
| a) Aeration Rooms (current)  |                     | AR                                      |   |  |  |  |
| b) Sterilizer Backvent SC1, SC2,   | SC3, SC5            | Backvent                                |   |  |  |  |
| c) Backup for Sterlizer Chamber  | s SC1-3, 5          | vacuum pump                             |   |  |  |  |
| d)   |                     |   |   |  |  |  |
| e)   |                     | *************************************** |   |  |  |  |
|  |                     | *************************************** |   |  |  |  |
| THE FOLLOWING INFORMATION NEED ONLY I  | BE SUPPLIED IF REAL |   |   |  |  |  |
| rogieniius.  |                     | b) LONGITUDE:                           |   |  |  |  |
| 50) UTM ZONE:  | b) UTM VERTICA      | L (KM):                                 | c) UTM HORIZONTAL (KM):                 |  |  |  |

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## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL - PERMIT SECTION P.O. BOX 19506

SPRINGFIELD, ILLINOIS 62794-9506

| Revision | #:          | >>>>>>>>> |              |
|----------|-------------|-----------|--------------|
| Date:    |             |           | 200000000000 |
| Page     |             |           |              |
| Source D | esignation: |           |              |

| PROC | ESS / | EMISSION | UNIT |
|------|-------|----------|------|
| DATA | AND   | INFORMA  | TION |

|           | FOR .    | AGENCY U:                               | SE ONLY                                 |   |  |
|-----------|----------|---|---|---|--|
| ID NUMBEI | ₹:       |   |   |   |  |
| EMISSION  | POINT #: | *************************************** | 000000000000000000000000000000000000000 |   |  |
| DATE      |          |   | 000000000000000000000000000000000       | *************************************** |  |

| SOURCE INFORMATION                    |   |  |  |  |  |
|---------------------------------------|---|--|--|--|--|
| 1) SOURCE NAME:                       |   |  |  |  |  |
| Sterigenics US, LLC                   |   |  |  |  |  |
| 2) DATE FORM<br>PREPARED: 27 Dec 2017 | 3) SOURCE ID NO.<br>(IF KNOWN): 043110AAC |  |  |  |  |

| GENERAL INFORMATION   |                                      |  |  |  |
|---|--------------------------------------|--|--|--|
| 4) NAME OF EMISSION UNIT:<br>WB1 (3) Aeration Rooms                                 |                                      |  |  |  |
| 5) NAME OF PROCESS:   |                                      |  |  |  |
| Aeration of Sterilized medical products and spices                                  |                                      |  |  |  |
| 6) DESCRIPTION OF PROCESS:  |                                      |  |  |  |
| Chemical Sterilization  |                                      |  |  |  |
| 7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR ACTIVITY ACCOMPLISHED:               |                                      |  |  |  |
| Sterilized Medical Supplies and Treated Spices                                      |                                      |  |  |  |
| 8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT:                                       |                                      |  |  |  |
| Aeration Rooms  |                                      |  |  |  |
| 9) MANUFACTURER OF EMISSION UNIT (IF KNOWN):  |                                      |  |  |  |
| Unknown   |                                      |  |  |  |
| 10) MODEL NUMBER (IF KNOWN):  | 11) SERIAL NUMBER (IF KNOWN):        |  |  |  |
| unknown   | unknown                              |  |  |  |
| 12) DATES OF COMMENCING CONSTRUCTION,   | a) CONSTRUCTION (MONTH/YEAR):        |  |  |  |
| OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED) | June 1984                            |  |  |  |
| , ,   | b) OPERATION (MONTH/YEAR):           |  |  |  |
|   | May 1985                             |  |  |  |
|   | c) LATEST MODIFICATION (MONTH/YEAR): |  |  |  |
| -   | March 1998                           |  |  |  |
| 13) DESCRIPTION OF MODIFICATION (IF APPLICABLE).                                    | 04/                                  |  |  |  |

The aeration rooms have an emission limit of 3.6 lbs/hr and 15.77 tons/year pursuant to construction permit 96120054. These emission limits exceed the potential emissions. This application requests the emission limits to align with the potential emissions.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

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FOR APPLICANT'S USE

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| 14) DOES THE EMISSION UNIT HA  | VE MO                                   | RE THAN ONE N                               | AODE OF (             | PERATION                                | ?                        | <b>7</b> 7                              | V                                |  |
|--|---|---|-----------------------|---|--------------------------|---|----------------------------------|--|
| IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE PROCESS EMISSION UNIT FORM 220-CAAPP MUST BE COMPLETED FOR EACH MODE):   |   |   |                       |   |                          |   |                                  |  |
|  |   |   |                       |   |                          |   |                                  |  |
| 15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENOUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT). |   |   |                       |   |                          |   |                                  |  |
| WB1 Acid Scrubber (scrubber  | #2) v                                   | rith Dry Bed R                              | eactor.               |   |                          |   |                                  |  |
| 16) WILL EMISSIONS DURING STARTUP EXCEED EITHER THE ALLOWABLE EMISSION YES NO RATE PURSUANT TO A SPECIFIC RULE, OR THE ALLOWABLE EMISSION LIMIT AS YES NO ESTABLISHED BY AN EXISTING OR PROPOSED PERMIT CONDITION?   |   |   |                       |   |                          |   |                                  |  |
| IF YES, COMPLETE AND ATTA<br>EXCESS EMISSIONS DURING :   |   |   |                       | r to oper/                              | TE WITH                  |   |                                  |  |
| 17) PROVIDE ANY LIMITATIONS OF<br>STANDARDS (E.G., ONLY ONE  |   |   |                       | ING EMISSI                              | ONS OR ANY W             | ORK P                                   | RACTICE                          |  |
| Monthly usage limitations for p  |   |   |                       | oxide sha                               | ill not exceed           | 2800                                    | pounds and                       |  |
| 70,000 pounds respectively fo  |   |   | *                     |   |                          |   |                                  |  |
| calculated based on this usage   | ž,                                      |   |                       |   |                          |   |                                  |  |
|  |   |   |                       |   |                          |   |                                  |  |
|  | 200000000000000000000000000000000000000 | ***************************************     |                       | *************************************** |                          | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |                                  |  |
|  | 000000000000000000000000000000000000000 | OPERATING                                   | * 181EAB              | 8 8 8 72 73 8 1                         |                          | *************************************** |                                  |  |
| 18) ATTACH THE CALCULATIONS,<br>FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT   | RMAT                                    | E EXTENT THEY<br>ION, MATERIAL I            | ' ARE AIR<br>USAGE IN | EMISSION F                              | I AND FUEL US            |   |                                  |  |
| 19a) MAXIMUM OPERATING HOUR  | \$                                      | HOURS/DAY:                                  |                       | DAYS/WE                                 |                          | weev                                    | S/YEAR:                          |  |
| 8760 per year  |   | 24  |                       |   | 7                        |   | 52                               |  |
| b) TYPICAL OPERATING HOURS   |   | HOURS/DAY:                                  | DAYSWEEK              |   |                          | WEEKS/YEAR                              |                                  |  |
| 8600 per year  |   | 24  |                       |   |                          |   |                                  |  |
| nann has kame  |   |   |                       |   | 7                        |   |                                  |  |
| 20) ANNI IAI THROUGHPUT  |   | ***************************************     | THAR                  | .88AY/%\\                               | 7<br>1                   |   | 52                               |  |
| 20) ANNUAL THROUGHPUT  |   | DEC-FEB(%):<br>25                           | MAR                   | MAY(%)<br>25                            | 7<br>  JUN-AUG(%<br>  25 | »);                                     |                                  |  |
| 20) ANNUAL THROUGHPUT  |   | DEC-FEB(%):<br>25                           |                       | 25                                      | JUN-AUG(%<br>25          | ·):                                     | 52<br>SEP-NOV(%):                |  |
| 20) ANNUAL THROUGHPUT  |   | DEC-FEB(%):                                 |                       | 25                                      | JUN-AUG(%<br>25          | 5):                                     | 52<br>SEP-NOV(%):                |  |
| 20) ANNUAL THROUGHPUT  |   | DEC-FEB(%):<br>25                           | GE INF                | 25                                      | JUN-AUG(% 25             | ypical.                                 | 52<br>SEP-NOV(%):<br>25          |  |
| 20) ANNUAL THROUGHPUT  21a) RAW MATERIALS  |   | DEC-FEB(%):<br>25<br>ATERIAL US/            | GE INF                | 25<br>ORMATIO                           | JUN-AUG(% 25             |   | 52<br>SEP-NOV(%):<br>25          |  |
|  |   | DEC-FEB(%):<br>25<br>ATERIAL US/<br>MAXIMUM | AGE INF               | 25<br>ORMATIO                           | J JUN-AUG(% 25 N         |   | 52<br>SEP-NOV(%):<br>25<br>RATES |  |
| 21a) RAW MATERIALS   |   | DEC-FEB(%):<br>25<br>ATERIAL US/<br>MAXIMUM | AGE INF               | 25  ORMATIO                             | J JUN-AUG(% 25 N         |   | 52<br>SEP-NOV(%):<br>25<br>RATES |  |
| 21a) RAW MATERIALS<br>Ethylene Oxide   |   | DEC-FEB(%):<br>25<br>ATERIAL US/<br>MAXIMUM | AGE INF               | 25<br>ORMATIO<br>YEAR<br>420            | J JUN-AUG(% 25 N         |   | 52<br>SEP-NOV(%):<br>25<br>RATES |  |
| 21a) RAW MATERIALS<br>Ethylene Oxide   |   | DEC-FEB(%):<br>25<br>ATERIAL US/<br>MAXIMUM | AGE INF               | 25<br>ORMATIO<br>YEAR<br>420            | J JUN-AUG(% 25 N         |   | 52<br>SEP-NOV(%):<br>25<br>RATES |  |
| 21a) RAW MATERIALS<br>Ethylene Oxide   |   | DEC-FEB(%):<br>25<br>ATERIAL US/<br>MAXIMUM | AGE INF               | 25<br>ORMATIO<br>YEAR<br>420            | J JUN-AUG(% 25 N         |   | 52<br>SEP-NOV(%):<br>25<br>RATES |  |

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|   |   |   |             |   |              |   |                 | -  |
|---|---|---|-------------|---|--------------|---|-----------------|--|
|   | MAXIMUM RATES                           |   |             | ATES  |              | TYPIC                                   | AL R            | ATES   |
| 21b) PRODUCTS   | LB                                      | S/HR                                    |             | TONS/YEAR   |              | LBS/HR                                  |                 | TONS/YEAR  |
| N/A   |   |   |             |   |              |   |                 |  |
|   | *************************************** |   | å           |   |              |   | i               | ***************************************              |
|   | AMARIAN NO 21000                        |   | *           |   | -            | *************************************** | dunnun          | ***************************************              |
|   | 2000000                                 |   |             |   | -            | *************************************** |                 | ***************************************              |
|   | *************************************** |   | Å           |   |              |   | home            | ***************************************              |
|   | *************************************** |   |             | ***************************************                                   | *****        |   | damoo           |  |
|   | 000000000000000000000000000000000000000 |   |             | 00000dbcccccc   |              |   |                 | 000000000000000000000000000000000000000              |
| Γ   |   | UMIXAM                                  | MF          | LATES   |              | TYPIC                                   | NL R            | ATES   |
| 21c) BY-PRODUCT MATERIALS                               | LB                                      | S/HR                                    |             | TONS/YEAR   | -            | LBS/HR                                  |                 | TONS/YEAR  |
| N/A   |   |   | ŕ           | ***************************************                                   |              | *************************************** | *               |  |
|   | *************************************** | *************************************** |             |   | -            |   | bunna           | ***************************************              |
|   | *************************************** |   | ř           | ***************************************                                   |              |   | ·               |  |
|   | *************************************** |   | *           |   | -            |   |                 | **************************************               |
|   | *************************************** |   | -           |   | -            |   |                 |  |
|   | *************************************** |   | -           |   | -            |   | ŀ               | ***************************************              |
|   | *************************************** |   |             |   |              |   |                 | ***************************************              |
| ## 1  |   |   |             | AGE DATA  | ************ | 00000000000000000000000000000000000000  | 000000000       | 00000000000000000000000000000000000000               |
| 22a) MAXIMUM FIRING RATE<br>(MILLION BTU/HR):           | 0                                       | TYPICAL F<br>(MILLION I                 | IRIN<br>BTU | IG RATE<br>//HR):   | 0            | ) DESIGN CAPAC<br>RATE (MILLION         |                 |  |
| N/A   |   |   | N           | Ά   | N/A          |   |                 |  |
| a) FUEL TYPE:   |   | *************************************** | 20000000    |   |              |   | **********      | WWW.damananagogg.coooccoooccooccooccooccooccooccoocc |
| ONATURAL GAS OFUEI                                      | L OIL: G                                | RADE NUM                                | 8EF         | r Occ   | DAL.         | OOTHER                                  |                 |  |
| IF MORE THAN ONE FUEL IS U                              |   |   |             |   |              |   |                 | ***************************************              |
| e) TYPICAL HEAT CONTENT OF F                            | UEL (B                                  | TU/LB,                                  |             | n Typical Sulfi   | ŪR           | CONTENT (WT %                           | ., N            | A FOR NATURAL  |
| BTU/GAL OR BTU/SCF):                                    |   |   |             | GAS):   |              |   |                 |  |
|   |   |   |             |   |              |   |                 |  |
| g) TYPICAL ASH CONTENT (WT 5<br>GAS):                   | %., NA I                                | FOR NATUR                               | AL          | h) ANNUAL FUEL USAGE (SPECIFY UNITS, E.G., SCF/YEAR, GAL/YEAR, TON/YEAR): |              |   |                 | rs, e.g.,  |
|   |   |   |             |   |              | ·                                       | •               |  |
| 23) ARE COMBUSTION EMISSIONS<br>PROCESS UNIT EMISSIONS? | DUCTI                                   | ED TO THE                               | SAN         | IE STACK OR CONTI   | ROI          | . AS                                    | ) <sub>YI</sub> | es O NO  |
| IF NO, IDENTIFY THE EXHAUST                             | POINT                                   | FOR COME                                | BUS         | TION EMISSIONS:   |              |   |                 |  |
|   |   |   |             |   |              |   |                 |  |
|   |   |   |             |   |              |   |                 |  |
|   |   |   |             |   |              |   |                 |  |

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|   | APPLICABLE RU  |   |
|---|--|---|
| 24) PROVIDE ANY SPECIFIC EMISSION STANDA<br>REGULATED AIR POLLUTANT(8)  | RD(S) ÅND LIMITATION(S) SET BY RULE(S) WHICH Ä<br>EMISSION STANDARD(S) | RE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.204(j)(4), 3.5 LBS/GAL)  REQUIREMENT(S) |
| VOM   | 35 IAC 218.302(b)  | At least 85% recovery of total uncontrolled org. mat.   |
| НАР   | 40CFR 63.362   | 99% reduction or 1 ppm outlet   |
| L  25) PROVIDE ANY SPECIFIC RECORDICEPING I  REGULATED AIR POLLUTANT(S) |  | UNIT:  REQUIREMENT(S)   |
| HAP   | 40 CFR 63.10   | MACT recordkeeping and reporting  |
|   |  |   |
| (8) PROVIDE ANY SPECIFIC REPORTING RULE<br>REGULATED AIR POLLUTANT(S)   | S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT<br>REPORTING RULE(S)     | T:  REQUIREMENT(S)  |
| HAP   | 40 CFR 63.10   | MACT recordkeeping and reporting  |
|   |  |   |
| 7) PROVIDE ANY SPECIFIC MONITORING RULE                                 | (S) WHICH ARE APPLICABLE TO THIS EMISSION UN                           | 18°:  |
| REGULATED AIR POLLUTANT(S)  | MONITORING RULE(S)   | REQUIREMENT(S)  |
| HAP   | 40CFR 63.364   | Weekly Scrubber liquor level  |
|   | 40CFR 63.364   | Weekly EO concentration from dry beds   |
| SOLDDAVANE ANY SPECIFIC TESTING BILLES AN                               | ID/OR PROCEDURES WHICH ARE APPLICABLE TO T                             | WE CHICSON INIT   |
| REGULATED AIR POLLUTANT(S)  | TESTING RULE(S)  | REQUIREMENT(S)  |
| НАР   | 40 CFR63.365   | Testing of control equipment  |
|   |  |   |
| §   |  |   |

| 29) DOES THE EMISSION UNIT QUALIFY FO   | d ar everier or edge ar   |   |   |  |  |  |  |  |
|---|---|---|---|--|--|--|--|--|
| OTHERWISE APPLICABLE RULE?  | L DIS TVEISE, I FAS LLFAIS WIS                                      | U YES                                   | ₩ NO                                    |  |  |  |  |  |
| IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 220-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION. |   |   |   |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |
| C:<br>30) IS THE EMISSION UNIT IN COMPLIANCE  | OMPLIANCE INFORMATION WITH ALL APPLICABLE                           |   | ~~~                                     |  |  |  |  |  |
| REQUIREMENTS?   | n we o ve o "Shada o "St. O ha Sheef" Marko Baka                    | Ø yes                                   | UNO                                     |  |  |  |  |  |
| IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.  |   |   |   |  |  |  |  |  |
| 31) EXPLANATION OF HOW INITIAL COMPLI   | ANCE IS TO BE, OR WAS PREVIOUS!                                     | Y, DEMONSTRATED                         |   |  |  |  |  |  |
| WB1 Scrubber 2 was tested January   | 23, 2003  |   |   |  |  |  |  |  |
| *   |   |   |   |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |
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|   |   |   |   |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |
| 32) EXPLANATION OF HOW ONGOING COM  | PLIANCE WILL BE DEMONSTRATED:                                       |   |   |  |  |  |  |  |
| WB1 Scrubber 2 is required to monito  | r scrubber liauor level weekly, ol                                  | H weekly.                               |   |  |  |  |  |  |
| EO concentration is checked weekly t  | * * *   |   |   |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |
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|   |   |   |   |  |  |  |  |  |
|   |   |   |   |  |  |  |  |  |
|   |   | *************************************** |   |  |  |  |  |  |
| TESTING MONITO  | RING, RECORDKEEPING AND   | PEPORTING                               |   |  |  |  |  |  |
| 33a) LIST THE PARAMETERS THAT RELATE  | TO AIR EMISSIONS FOR WHICH REC                                      | ORDS ARE BEING M                        |   |  |  |  |  |  |
| DETERMINE FEES, RULE APPLICABILIT<br>METHOD OF MEASUREMENT, AND THE   |   |   |   |  |  |  |  |  |
|   | so so source to so a source to a construction of ground growth fig. |   | ,                                       |  |  |  |  |  |
| PARAMETER UNIT OF MEASI   | JREMENT METHOD OF MEASURE   | MENT FRE                                | QUENCY                                  |  |  |  |  |  |
| EO conc ppm   | GLC from dry bed  | l weekly                                | *************************************** |  |  |  |  |  |
| Liquor level inches   | Operating data  | weekly                                  |   |  |  |  |  |  |
|   |   | *************************************** | *************************************** |  |  |  |  |  |
|   | 70007*00000000000000000000000000000000                              |   |   |  |  |  |  |  |
|   | 20000000000000000000000000000000000000                              |   |   |  |  |  |  |  |
|   |   | 1 1                                     |   |  |  |  |  |  |

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| RECORDED PARAME   | ETER INCLUDE THE METHOD     | CORDS WILL BE CREATED AND M<br>OF RECORDKEEPING, TITLE OF F<br>INTACT FOR REVIEW OF RECORD | PERSON RESPONSIBLE FOR     |
|---|-----------------------------|--|----------------------------|
| PARAMETER   | METHOD OF<br>RECORDKEEPING  | TITLE OF PERSON RESPONSIBLE  | TITLE OF<br>CONTACT PERSON |
| EO conc   | PM Records                  | General Manager  | EH&S                       |
| Liquor Level  | PM records                  | General Manager  | EH&S                       |
|   |                             |  |                            |
|   |                             |  |                            |
|   |                             |  |                            |
| c) IS COMPLIANCE OF TH                                    | IE EMISSION UNIT READILY (  | DEMONSTRATED BY REVIEW OF  | Ø yes O no                 |
| IF NO, EXPLAIN:   |                             |  |                            |
| ·   |                             |  |                            |
|   |                             |  |                            |
|   |                             |  |                            |
| ALABE ALL BECTBIS BE                                      | ADILY AVAILABLE FOR INSPI   | FCTION COPYING AND   |                            |
|   | SENCY UPON REGUEST?         | so day senara ay narapro a xa a nara sa a apar   | Ø YES O NO                 |
| IF NO, EXPLAIN:   |                             |  |                            |
|   |                             |  |                            |
|   |                             |  |                            |
|   |                             |  |                            |
| 34a) DESCRIBE ANY MONI<br>COMPLIANCE:                     | TORS OR MONITORING ACTI     | VITIES USED TO DETERMINE FEE   | S, RULE APPLICABILITY OR   |
| Monitor and record the                                    | level of the scrubber liquo |  |                            |
| Monitor the EtO concer                                    | ntration entering and exiti | ng the Dry Beds.   |                            |
|   |                             |  |                            |
|   |                             | (E.G., VOM EMISSIONS TO ATMOS  | PHERE)7                    |
| Level of scrubber liquo<br>EtO levels from the Dry        |                             |  |                            |
| ~10 10 4019 11 MILL 11 11 11 11 11 11 11 11 11 11 11 11 1 |                             |  |                            |
|   |                             |  |                            |
| c) DESCRIBE THE LOCAT                                     | ION OF EACH MONITOR (E.G.   | ., IN STACK MONITOR 3 FEET FRO   | M EXIT):                   |
|   |                             |  |                            |
|   |                             |  |                            |
|   |                             |  |                            |
|   |                             |  |                            |

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| and) in many interesting the restrict in the si  | VITH A RECORDING DEVICE?  | 000000000000000000000000000000000000000   | O YES  | O NO                             |
|--|---|---|--|----------------------------------|
| IF NO, LIST ALL MONITORS WITHO   | UT A RECORDING DEVICE:  |   |  |                                  |
| N/A  |   |   |  |                                  |
| 00000000000000000000000000000000000000   |   |   |  |                                  |
| 2000   |   |   |  |                                  |
| 200000000  |   |   |  |                                  |
|  | 5 6 MM 167  | ~~  |  |                                  |
| e) IS EACH MONITOR REVIEWED FOR<br>BASIS?  | ( ACCURACY ON A I LEAST A   | CUARIERLY   | U YES  | U NO                             |
| IF NO, EXPLAIN:  |   |   |  |                                  |
| N/A  |   |   |  |                                  |
| ***************************************  |   |   |  |                                  |
|  |   |   |  |                                  |
|  |   |   |  |                                  |
|  |   |   |  |                                  |
| f) IS EACH MONITOR OPERATED AT /<br>IN OPERATION?  | ALL TIMES THE ASSOCIATED  | EMISSION UNIT IS  | O YES  | <b>Ø</b> 140                     |
|  |   |   |  |                                  |
| IF NO, EXPLAIN: No continuous monitoring is requi  | irad  |   |  |                                  |
| 140 commons montaing is requ   | 99 Kill 148 .   |   |  |                                  |
|  |   |   |  |                                  |
|  |   |   |  |                                  |
|  |   |   |  |                                  |
|  |   |   | 000000000000000000000000000000000000000  |                                  |
| 35) PROVIDE INFORMATION ON THE M   |   |   |  |                                  |
| PURPOSES OF THE DETERMINATION  | ON OF FEES, RULE APPLICAE   | BILITY OR COMPLI  | ANCE. INCLUDE TH   | IE TEST                          |
|  | ON OF FEES, RULE APPLICAE<br>ING COMPANY, OPERATING (   | BILITY OR COMPLI<br>CONDITIONS EXIS   | ANCE. INCLUDE TH<br>TING DURING THE  | IE TEST                          |
| PURPOSES OF THE DETERMINATION  DATE, TEST METHOD USED, TESTI SUMMARY OF RESULTS. IF ADDITION   | ON OF FEES, RULE APPLICAE<br>ING COMPANY, OPERATING (<br>IONAL SPACE IS NEEDED, AT  | BILITY OR COMPLIC<br>CONDITIONS EXIS<br>TACH AND LABEL<br>OPERATING                         | ANCE. INCLUDE TH<br>TING DURING THE '<br>AS EXHIBIT 220-4:   | IE TEST<br>(EST AND A            |
| PURPOSES OF THE DETERMINATION DATE, TEST METHOD USED, TESTI SUMMARY OF RESULTS. IF ADDITION TEST DATE TEST METHOD  | ON OF FEES, RULE APPLICAE ING COMPANY, OPERATING ( IONAL SPACE IS NEEDED, AT  TESTING COMPANY                                       | BILITY OR COMPLICONDITIONS EXIST<br>TACH AND LABEL<br>OPERATING<br>CONDITIONS               | ANCE. INCLUDE THE TING DURING THE TAX EXHIBIT 220-4:  SUMMARY OF   | IE TEST<br>(EST AND A<br>RESULTS |
| PURPOSES OF THE DETERMINATION  DATE, TEST METHOD USED, TESTI SUMMARY OF RESULTS. IF ADDITION   | ON OF FEES, RULE APPLICAE<br>ING COMPANY, OPERATING (<br>IONAL SPACE IS NEEDED, AT  | BILITY OR COMPLIC<br>CONDITIONS EXIS<br>TACH AND LABEL<br>OPERATING                         | ANCE. INCLUDE TH<br>TING DURING THE '<br>AS EXHIBIT 220-4:   | IE TEST<br>(EST AND A<br>RESULTS |
| PURPOSES OF THE DETERMINATION DATE, TEST METHOD USED, TESTI SUMMARY OF RESULTS. IF ADDITION TEST DATE TEST METHOD  | ON OF FEES, RULE APPLICAE ING COMPANY, OPERATING ( IONAL SPACE IS NEEDED, AT  TESTING COMPANY                                       | BILITY OR COMPLICONDITIONS EXIST<br>TACH AND LABEL<br>OPERATING<br>CONDITIONS               | ANCE. INCLUDE THE TING DURING THE TAX EXHIBIT 220-4:  SUMMARY OF   | E TEST<br>FEST AND A<br>RESULTS  |
| PURPOSES OF THE DETERMINATION DATE, TEST METHOD USED, TESTI SUMMARY OF RESULTS. IF ADDITION TEST DATE TEST METHOD  | ON OF FEES, RULE APPLICAE ING COMPANY, OPERATING ( IONAL SPACE IS NEEDED, AT  TESTING COMPANY                                       | BILITY OR COMPLICONDITIONS EXIST<br>TACH AND LABEL<br>OPERATING<br>CONDITIONS               | ANCE. INCLUDE THE TING DURING THE TAX EXHIBIT 220-4:  SUMMARY OF   | IE TEST<br>(EST AND A<br>RESULTS |
| PURPOSES OF THE DETERMINATION DATE, TEST METHOD USED, TESTI SUMMARY OF RESULTS. IF ADDITION TEST DATE TEST METHOD  | ON OF FEES, RULE APPLICAE ING COMPANY, OPERATING ( IONAL SPACE IS NEEDED, AT  TESTING COMPANY                                       | BILITY OR COMPLICONDITIONS EXIST<br>TACH AND LABEL<br>OPERATING<br>CONDITIONS               | ANCE. INCLUDE THE TING DURING THE TAX EXHIBIT 220-4:  SUMMARY OF   | E TEST<br>FEST AND A<br>RESULTS  |
| PURPOSES OF THE DETERMINATION DATE, TEST METHOD USED, TESTI SUMMARY OF RESULTS. IF ADDITION 1/21/03  | ON OF FEES, RULE APPLICAE ING COMPANY, OPERATING ( IONAL SPACE IS NEEDED, AT  TESTING COMPANY  Kremer Env.                          | OPERATING CONDITIONS EXISTACH AND LABEL OPERATING CONDITIONS Normal                         | ANCE. INCLUDE THE TING DURING THE AS EXHIBIT 220-4:  SUMMARY OF PROPERTY OF PR | RESULTS ency                     |
| PURPOSES OF THE DETERMINATION  DATE, TEST METHOD USED, TEST SUMMARY OF RESULTS. IF ADDITION  TEST DATE TEST METHOD   | ON OF FEES, RULE APPLICAE ING COMPANY, OPERATING ( IONAL SPACE IS NEEDED, AT  TESTING COMPANY  Kremer Env.                          | OPERATING CONDITIONS EXISTACH AND LABEL OPERATING CONDITIONS Normal                         | ANCE. INCLUDE THE TING DURING THE AS EXHIBIT 220-4:  SUMMARY OF PROPERTY OF PR | RESULTS ency                     |
| PURPOSES OF THE DETERMINATION DATE, TEST METHOD USED, TEST SUMMARY OF RESULTS. IF ADDITED TO SUMARY OF RESULTS. IF | ON OF FEES, RULE APPLICAE ING COMPANY, OPERATING ( IONAL SPACE IS NEEDED, AT  TESTING COMPANY  Kremer Env.                          | OPERATING CONDITIONS EXISTACH AND LABEL OPERATING CONDITIONS Normal                         | ANCE. INCLUDE THE TING DURING THE AS EXHIBIT 220-4:  SUMMARY OF PROPERTY OF PR | RESULTS ency                     |
| PURPOSES OF THE DETERMINATION DATE, TEST METHOD USED, TESTING SUMMARY OF RESULTS. IF ADDITION OF TESTING REQUIREMENTS  36) DESCRIBE ALL REPORTING REQUIREMENTS   | ON OF FEES, RULE APPLICAE ING COMPANY, OPERATING ( IONAL SPACE IS NEEDED, AT  TESTING COMPANY  Kremer Env.  REMENTS AND PROVIDE THE | BILITY OR COMPLICONDITIONS EXISTACH AND LABEL  OPERATING CONDITIONS  Normal  TITLE AND FREC | ANCE. INCLUDE THE TING DURING THE AS EXHIBIT 220-4:  SUMMARY OF SUMARY OF SUMMARY OF SUMARY OF SUMMARY OF SUMMARY OF SUMMARY OF SUMA | RESULTS ency                     |
| PURPOSES OF THE DETERMINATION DATE, TEST METHOD USED, TESTING SUMMARY OF RESULTS. IF ADDITION TO THE SUMMARY OF RESULTS. IF ADDITION TO THE AGENCY:  | ON OF FEES, RULE APPLICAE ING COMPANY, OPERATING O IONAL SPACE IS NEEDED, AT  TESTING COMPANY  Kremer Env.  REMENTS AND PROVIDE THE | BILITY OR COMPLICONDITIONS EXISTACH AND LABEL  OPERATING CONDITIONS  Normal  TITLE AND FREC | ANCE. INCLUDE THE TING DURING THE AS EXHIBIT 220-4:  SUMMARY OF POST SUMMARY OF POST SUMMARY OF POST SUMMARY OF POST SUMMARY OF REPORT SUMMARY OF SUMMARY OF REPORT SUMMARY OF REPORT SUMMARY OF SUMARY OF SUMMARY OF SUMARY OF SUMMARY OF SUMARY | RESULTS ency                     |
| PURPOSES OF THE DETERMINATION DATE, TEST METHOD USED, TESTING SUMMARY OF RESULTS. IF ADDITION OF TESTING REQUIREMENTS  36) DESCRIBE ALL REPORTING REQUIREMENTS   | ON OF FEES, RULE APPLICAE ING COMPANY, OPERATING ( IONAL SPACE IS NEEDED, AT  TESTING COMPANY  Kremer Env.  REMENTS AND PROVIDE THE | BILITY OR COMPLICONDITIONS EXISTACH AND LABEL  OPERATING CONDITIONS  Normal  TITLE AND FREC | ANCE. INCLUDE THE TING DURING THE AS EXHIBIT 220-4:  SUMMARY OF POST SUMMARY OF POST SUMMARY OF POST SUMMARY OF POST SUMMARY OF REPORT SUMMARY OF SUMMARY OF REPORT SUMMARY OF REPORT SUMMARY OF SUMARY OF SUMMARY OF SUMARY OF SUMMARY OF SUMARY | RESULTS ency                     |

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|                            |          |                             |                               |                             | (37)                        | <i>Emissio</i> n | INFORM/           | <i><b>NTION</b></i> |   |   |     |              |                               |
|----------------------------|----------|-----------------------------|-------------------------------|-----------------------------|-----------------------------|------------------|-------------------|---------------------|---|---|-----|--------------|-------------------------------|
|                            |          | (                           | D 'actual en<br>D 'uncontro   | ISSION RATE<br>LLED EMISSIO | N RATE                      |                  | ALLC              | )WABLE B            | Y RULE EMISS                            | ION RATE                                | ²PE | RMITTED EMIS | SION RATE                     |
| REGULATED AIR<br>POLLUTANT |          | LBS PER<br>HOUR<br>(LBSAHR) | TONS PER<br>YEAR<br>(TONS/YR) | <sup>3</sup> OTHER<br>TERMS | <sup>3</sup> OTHER<br>TERMS | <sup>4</sup> DM  | 5 <sub>RATE</sub> | (UNITS)             | APPLICABLE<br>RULES                     | TONS PER<br>YEAR<br>(TONS/YR)           | RA' | TE (UNITS)   | TONS PER<br>YEAR<br>(TONS/YR) |
| CARBON                     | MAXIMUM: |                             |                               |                             |                             |                  |                   | ( )                 |   | 000000000000000000000000000000000000000 |     |              |                               |
| MONOXIDE (CO)              | TYPICAL  |                             |                               |                             |                             |                  |                   | ( . )               |   |   |     |              |                               |
| LEAD                       | MAXIMUM: |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
|                            | TYPICAL  |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
| NITROGEN                   | MAXIMUM: |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
| OXIDES (NOx)               | TYPICAL  |                             |                               |                             |                             |                  |                   | { }                 |   |   |     |              |                               |
| PARTICULATE                | MAXIMUM: |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
| MATTER (PART)              | TYPICAL  |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
| PARTICULATE MATTER <= 10   | MAXIMUM: |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
| MICROMETERS<br>(PM10)      | TYPICAL: |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
| SULFUR                     | MAXIMUM: |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
| DIOXIDE (SO2)              | TYPICAL: |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
| VOLATILE<br>ORGANIC        | MAXIMUM: |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
| MATERIAL (VOM)             | TYPICAL: |                             |                               |                             |                             |                  | 8                 | ( )                 | *************************************** |   |     |              |                               |
| OTHER,<br>SPECIFY:         | MAXIMUM: | See Ex.                     | 220-a                         |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
|                            | TYPICAL  |                             |                               |                             |                             |                  |                   | ( )                 |   |   |     |              |                               |
| EXAMPLE:<br>PARTICULATE    | MAXIMUM: | 5.00                        | 21.9                          | 0.3<br>GR/DSCF              |                             | 1                | 6.0 (             | LBS/HR)             | 212.321                                 | 26.28                                   |     | 5.5 LBS/HR   | 22                            |
| MATTER                     | TYPICAL: | 4.00                        | 14.4                          | 0.24<br>GRØSCF              | -                           | 4                | 5.5 (             | LBS/HR)             | 212.321                                 | 19.80                                   |     |              |                               |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-8.

<sup>1</sup>CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS. PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.

PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)

<sup>4</sup>DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).
5RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

|                        |   | (3                   | 8) HAZARDOUS                   | AIR POLLUTAN                     | IT EMISSION I               | NFORMATIO       | ¥                             |                    |
|------------------------|---|----------------------|--------------------------------|----------------------------------|-----------------------------|-----------------|-------------------------------|--------------------|
|                        |   |                      | O 1ACTU<br>O 1UNC              | AL EMISSION RA<br>INTROLLED EMIS | ALLOWABLE BY RULE           |                 |                               |                    |
| NAME OF HAP<br>EMITTED | <sup>2</sup> CAS<br>NUMBER              |                      | POUNDS PER<br>HOUR<br>(LBS/HR) | TONS PER<br>YEAR<br>(TONS/YR)    | <sup>3</sup> OTHER<br>TERMS | <sup>4</sup> DM | <sup>5</sup> RATE OR STANDARD | APPLICABLE<br>RULE |
| Ethylene Oxide         | 75-21-8                                 | MAXIMUM:<br>TYPICAL: | See Exhibit                    | 220-а                            |                             |                 |                               |                    |
| Propylene Oxide        | 75-56-9                                 | MAXIMUM:<br>TYPICAL: | See Exhibit                    | 220-а                            |                             |                 |                               |                    |
|                        |   | WAXIMUM:<br>TYPICAL  |                                |                                  |                             |                 |                               |                    |
|                        |   | WAXIMUM:             |                                |                                  |                             |                 |                               |                    |
|                        |   | TYPICAL:<br>MAXIMUM: |                                |                                  |                             |                 |                               |                    |
|                        |   | TYPICAL:             |                                |                                  |                             |                 |                               |                    |
|                        |   | TYPICAL:             |                                |                                  |                             |                 |                               |                    |
|                        |   | MAXIMUM:<br>TYPICAL: |                                |                                  |                             |                 |                               |                    |
|                        | *************************************** | MAXIMUM:<br>TYPICAL: |                                |                                  |                             |                 |                               |                    |
| EXAMPLE:               |   | MAXIMUM:             | 10.0                           | 1.2                              |                             |                 | 98% by wt control device      | CFR 61             |
| Benzene                | 71432                                   | TYPICAL              | 8.0                            | 0.8                              |                             | 2               | leak-tight trucks             | 61.302(b),(d)      |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY. CAS - CHEMICAL ABSTRACT SERVICE NUMBER.

PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).
DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS). SRATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

| EXHAUST POINT INFORMATION  |   |   |                       |  |  |  |  |  |
|--|---|---|-----------------------|--|--|--|--|--|
| THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.   |   |   |                       |  |  |  |  |  |
| 39) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:   |   |   |                       |  |  |  |  |  |
| WB1 Scrubber #2 with dry bed   |   |   |                       |  |  |  |  |  |
| 40) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.) IF THE EXHAUST POINT<br>DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS. |   |   |                       |  |  |  |  |  |
| Outside Stack  |   |   |                       |  |  |  |  |  |
| 41) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):  |   |   |                       |  |  |  |  |  |
| approx 20 feet   |   |   |                       |  |  |  |  |  |
| 42) DISCHARGE HEIGHT ABOVE GRADE   | (FT):                                   |   |                       |  |  |  |  |  |
| approx 30 feet   |   |   |                       |  |  |  |  |  |
| 43) GOOD ENGINEERING PRACTICE (GI  | EP) HEIGHT, IF KN                       | OWN (FT):                               |                       |  |  |  |  |  |
| Unknown  |   |   |                       |  |  |  |  |  |
| 44) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA. 24 inches               |   |   |                       |  |  |  |  |  |
| 45) EXIT GAS FLOW RATE   | a) MAXIMUM (AC                          | FW):                                    | b) TYPICAL (ACFM):    |  |  |  |  |  |
|  | 1:                                      | 5,500                                   | 15,500                |  |  |  |  |  |
| 46) EXIT GAS TEMPERATURE   | a) MAXIMUM (°F)                         |   | b) TYPICAL (°F):      |  |  |  |  |  |
|  | apı                                     | 210× 75                                 | approx 75             |  |  |  |  |  |
| 47) DIRECTION OF EXHAUST (VERTICAL Vertical  | L LATERAL, DOW                          | NWARD).                                 |                       |  |  |  |  |  |
| 48) LIST ALL EMISSION UNITS AND CON  | TROL DEVICES S                          | ERVED BY THIS EXHA                      | WST POINT:            |  |  |  |  |  |
| NAME   |   | FLO                                     | W DIAGRAM DESIGNATION |  |  |  |  |  |
| a) Aeration Rooms (current)  | *************************************** | AR                                      |                       |  |  |  |  |  |
| b) Sterilizer Backvent SC1, SC2,   | SC3, SC4                                | Backvent                                |                       |  |  |  |  |  |
| c) Backup for Sterlizer Chamber  | s SC1-4                                 | vacuum pump                             |                       |  |  |  |  |  |
| d)   | *************************************** | *************************************** |                       |  |  |  |  |  |
| ●}   |   |   |                       |  |  |  |  |  |
|  |   | *************************************** |                       |  |  |  |  |  |
| THE FOLLOWING INFORMATION NEED ONLY<br>49a) LATITUDE:  | BE SUPPLIED IF REA                      | DILY AVAILABLE.    b) LONGITUDE:        |                       |  |  |  |  |  |
| record markets a property.   |   | o, Luisus suc.                          |                       |  |  |  |  |  |
| 0) UTM ZONE: b) UTM VERTICAL (KM): c) UTM HORIZONTAL (KM):   |   |   |                       |  |  |  |  |  |

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#### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF AIR POLLUTION CONTROL — PERMIT SECTION P.O. BOX 19506 SPRINGFIELD, ILLINOIS 62794-9506

| FOR                                     | APPLICA     | nts use    | x<br>v<br>v<br>o |
|---|-------------|------------|------------------|
| Revision                                | #:          | ~~~~~~~~~~ |                  |
| Date:                                   | /           | /          | oronome.         |
| Page                                    | Whenenen    | of         |                  |
| Source (                                | Designation | า:         |                  |
| *************************************** |             |            |                  |

# PROCESS EMISSION UNIT

| POR AGENCY USE UNLY |
|---------------------|
| ID NUMBER:          |
| EMISSION POINT #:   |
| DATE:               |

| SOURCE IN                             | FORMATION                                 |
|---------------------------------------|---|
| 1) SOURCE NAME:                       |   |
| Sterigenics US, LLC                   |   |
| 2) DATE FORM<br>PREPARED: 30 May 2018 | 3) SOURCE ID NO.<br>(IF KNOWN): 043110AAC |

| GENERAL INFORMATION  |   |  |  |  |  |
|--|---|--|--|--|--|
| 4) NAME OF EMISSION UNIT: Sterilization Chambers (3 thirteen pallet and 1 twenty-six pallet capacity) SC-4 |   |  |  |  |  |
|  |   |  |  |  |  |
| 5) NAME OF PROCESS:  |   |  |  |  |  |
| Sterilization of medical products and spices   |   |  |  |  |  |
| 6) DESCRIPTION OF PROCESS:   |   |  |  |  |  |
| Chemical Sterilization   |   |  |  |  |  |
| 7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR A   | CTIVITY ACCOMPLISHED:                   |  |  |  |  |
| Sterilized Medical Supplies and Treated Spices   |   |  |  |  |  |
| 8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT:  |   |  |  |  |  |
| Sterilizer Chambers  |   |  |  |  |  |
| 9) MANUFACTURER OF EMISSION UNIT (IF KNOWN):   |   |  |  |  |  |
| Unknown  |   |  |  |  |  |
| 10) MODEL NUMBER (IF KNOWN):   | 11) SERIAL NUMBER (IF KNOWN):           |  |  |  |  |
| unknown  | unknown                                 |  |  |  |  |
| 12) DATES OF COMMENCING CONSTRUCTION,  | a) CONSTRUCTION (MONTH/YEAR):           |  |  |  |  |
| OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED)                        | July 1999                               |  |  |  |  |
| ,  | b) OPERATION (MONTH/YEAR):              |  |  |  |  |
|  | October 1999                            |  |  |  |  |
|  | c) LATEST MODIFICATION (MONTH/YEAR):    |  |  |  |  |
|  | October 2012                            |  |  |  |  |
| 491 NECKRISTICAL AF LACTURIO ATIOLI HE APPLICABLE.   | 72-7-0000000000000000000000000000000000 |  |  |  |  |

ia) describin of modification (if afficable).

The sterilization chambers includes the chamber vent (via vacuum pump) and the chamber exhaust vent (backvent) as one emission unit. The chamber exhaust vent currently exhausts uncontrolled to atmosphere. This modification proposes to control the backvents with the existing WBII AAT scrubber and dry beds.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992. CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

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| 14) DOES THE EMISSION UNIT HA  | VE MO  | RE THAN ONE                             | MODE                                    | OF (        | PERATION                                | ?                                       | (X) YE                                  | s O no             |
|--|--|---|---|-------------|---|---|---|--------------------|
| IF YES, EXPLAIN AND IDENTIF<br>A SEPARATE PROCESS EMISS<br>FOR EACH MODE):               |  |   |   |             |   |   |   |                    |
| The sterilization chambers inc   | ludes  | the chamber                             | vent (                                  | (via        | vacuum pi                               | ımp) and the                            | cham                                    | ber exhaust        |
| vent (backvent) as one emissi  | on un  | it. The chami                           | ber be                                  | ackv        | ent modifi                              | cation is cove                          | ered by                                 | / this form. The   |
| chamber vent is also controlle   | d by V   | VBII AAT Scr                            | ubber                                   | anc         | l dry bed.                              |   |   |                    |
| 15) PROVIDE THE NAME AND DES<br>EMISSION UNIT, IF APPLICABL<br>MUST BE COMPLETED FOR EA  | E (FOF   | NM 260-CAAPP /                          | AND TH                                  | HE A        | PPROPRIAT                               | E 260-CAAPP                             |   |                    |
| The chamber backvent is curre  | ently i  | uncontrolled.                           | This a                                  | appl        | ication pro                             | poses to du                             | at the c                                | :hamber            |
| exhaust vent (backvent) to the   |  |   |   |             | with Dry                                | Bed Reactor                             | . The ii                                | nformation         |
| provided below is required for   | the e  | xisting control                         | l devic                                 | 20.         |   |   |   |                    |
| 16) WILL EMISSIONS DURING STA<br>RATE PURSUANT TO A SPECII<br>ESTABLISHED BY AN EXISTING | ic Ru  | LE, OR THE ALI                          | LOWAE                                   | BLE E       | MISSION LI                              |   | O ye                                    | s 🖄 140            |
| IF YES, COMPLETE AND ATTAI<br>EXCESS EMISSIONS DURING !                                  |  |   |   | UEST        | TO OPERA                                | TE WITH                                 |   |                    |
| 17) PROVIDE ANY LIMITATIONS OF<br>STANDARDS (E.G., ONLY ONE                              | UNIT   | S OPERATED A                            | TATI                                    | VIE):       |   |   |   |                    |
| Usage limitations for total prop   | -  |   | ~                                       |             |   |   | ),800 p                                 | ounds per          |
| month and 244200 pounds pe   | r year   | Tor all emissi                          | on un                                   | KS II       | i AAiilOMDI                             | OK II.                                  |   |                    |
|  |  |   |   |             |   |   |   |                    |
|  |  |   |   |             |   |   |   |                    |
|  | ***************************************        |   | 000000000000000000000000000000000000000 |             | ******************************          | *************************************** | *************************************** |                    |
|  | ******************                             | OPERATIN                                | ******                                  | *********** | VVVVVVVVVVVVV                           |   |   |                    |
| 18) ATTACH THE CALCULATIONS,<br>FOLLOWING OPERATING INFO<br>BASED AND LABEL AS EXHIBIT   | RMAT   | ION, MATERIAL                           | USAG                                    | E IN        | ORMATION                                | I AND FUEL US                           | SAGE D                                  | H THE<br>STA WERE  |
| 19a) MAXIMUM OPERATING HOUR  | S  | HOURS/DAY:                              |   |             | DAYS/WE                                 | . K.                                    | WEEK                                    | S/YEAR:            |
| 8760 per year  |  | 24                                      |   |             | '                                       | 7                                       |   | 52                 |
| b) TYPICAL OPERATING HOURS   | <b></b>  | HOURS/DAY:                              | 000000000000000000000000000000000000000 |             | DAYS/WEI                                |   | WEEK                                    | SIYEAR:            |
| 8600 per year  |  | 24                                      |   |             |   | 7                                       |   | 52                 |
| 20) ANNUAL THROUGHPUT  | ***************************************        | DEC-FEB(%):                             |   | MAR.        | MAY(%);                                 | JUN-AUG(9                               | (e):                                    | SEP-NOV(%):        |
|  |  | 25                                      |   |             | 25                                      | 25                                      |   | 25                 |
|  | ****************                               |   |   | 0000000000  | 000000000000000000000000000000000000000 | *************************************** |   |                    |
|  | 2.5  |   |   |             |   |   |   |                    |
|  | . 1983<br>************************************ | <u>ATERIAL US</u>                       | AGE:                                    |             | ORMATIO                                 | N                                       | ·····                                   |                    |
|  |  | ATERIAL US                              | AGE.                                    | INP:        | ORMATIO                                 | <b></b>                                 | *************************************** |                    |
|  |  | ATERIAL US<br>MAXIMUM                   |   |             | <u> </u>                                | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | YPICAL                                  | RATES              |
| 21a) RAW MATERIALS   | ***************************************        | *************************************** | IRATE:                                  | <br>S       | ORMATIO<br>EAR                          | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | YPICAL                                  | RATES<br>TONS/YEAR |
|  | ***************************************        | MAXIMUM                                 | IRATE:                                  | S           | EAR                                     | T.                                      | YPICAL                                  |                    |
| 21a) RAW MATERIALS EO and PO   | ***************************************        | MAXIMUM                                 | IRATE:                                  | S           |   | T.                                      | YPICAL                                  |                    |
|  | ***************************************        | MAXIMUM                                 | IRATE:                                  | S           | EAR                                     | T.                                      | YPICAL                                  |                    |
|  | ***************************************        | MAXIMUM                                 | IRATE:                                  | S           | EAR                                     | T.                                      | YPICAL                                  |                    |
|  | ***************************************        | MAXIMUM                                 | IRATE:                                  | S           | EAR                                     | T.                                      | YPICAL                                  |                    |
|  | ***************************************        | MAXIMUM                                 | IRATE:                                  | S           | EAR                                     | T.                                      | YPICAL                                  |                    |

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|   | 1000000000000000                        | MAXIM                                    | MR   | ATES                                    |   | TYPI                                    | CAL I           | RATES                                   |
|---|---|--|--|---|---|---|-----------------|---|
| 21b) PRODUCTS   |   | LBS/HR I                                 | **************   | TONS/YEAR                               | -                                       | LBS/HR                                  |                 | TONS/YEAR                               |
|   |   | **************************************   | •  | 2 21 221 1 2021 2                       | -                                       | Pr P9 #55 & 5 & #                       | -               | 1 23127 1 4.741                         |
| N/A   |   | x  | -  |   |   |   | _               | *************************************** |
|   |   |  |  | ~~~~                                    |   | 9990-1                                  | 0000            |   |
|   |   |  |  | *************************************** |   |   |                 |   |
|   |   |  |  |   |   |   |                 |   |
| 000000000000000000000000000000000000000                                 |   | K0000000000000000000000000000000000000   | ľ  | 3000033                                 |   | 20000                                   |                 | 000000000000000000000000000000000000000 |
|   |   | 20000003                                 | -  |   |   | ····· <u>···················</u>        | 1               | 00000000000000000000000000000000000000  |
|   | Žq.                                     |  | anno de la constante de la con |   |   | *************************************** |                 |   |
|   | <u> </u>                                | MAXIMU                                   | JM R   | ATES                                    | P00000000                               | TYPI                                    | CALI            | RATES                                   |
| 21c) BY-PRODUCT MATERIALS   |   | LBS/HR                                   | 00000000000  | TONS/YEAR                               |   | LBS/HR                                  | T               | TONS/YEAR                               |
| N/A   | ļ                                       |  |  |   |   | ··                                      | 1               |   |
|   | ~~~~~                                   |  |  | *************************************** |   | *************************************** | 4               | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |
|   |   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  | -  | 000000000000000000000000000000000000000 | <b></b>                                 | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |                 |   |
|   | -00000000000000                         |  |  | *************************************** | -                                       | *************************************** | -               | *************************************** |
|   |   |  |  | 000000000000000000000000000000000000000 | <b></b>                                 |   |                 | *************************************** |
|   |   |  | -  |   |   |   | 4               | ~~~aaaaaaaaaaaaaaaaaaaa                 |
|   | ļ                                       | \$85000000000000000000000000000000000000 |  |   |   |   | <u></u>         |   |
| 0.0,40000000000000000000000000000000000                                 | 660000000000000000000000000000000000000 | FUEL                                     | ŪS   | AGE DATA                                | 200000000000000000000000000000000000000 | ···                                     | 88888800000000  | *************************************** |
| 22a) MAXIMUM FIRING RATE<br>(MILLION BTU/HR):                           |   | b) TYPICAL F<br>(MILLION                 | IRIN<br>ATII   | IG RATE<br>/HR)·                        | c)                                      | DESIGN CAP/                             |                 |   |
| N/A   |   | \$ 1 W 1 1 200 100 1 100 1 1             | N/   |   | RATE (MILLION BTU/HR):<br>N/A           |   |                 |   |
| d) FUEL TYPE:   | .~~                                     | 000000000000000000000000000000000000000  |  | •                                       |   | 00000000000000000000000000000000000000  |                 | 000000000000000000000000000000000000000 |
| •   |   |  |  | <i>~</i>                                |   | _                                       |                 |   |
| Onatural gas Ofu  |   |  |  |   |   |   |                 | 000000000000000000000000000000000000000 |
| IF MORE THAN ONE FUEL IS  |   |  | EXPL   |   | ***********                             | Si                                      | 00000000000     |   |
| <ul> <li>e) TYPICAL HEAT CONTENT OF<br/>BTU/GAL OR BTU/SCF):</li> </ul> | FUEL                                    | (BTU/LB,                                 |  | f) TYPICAL SULI<br>GAS):                | FUR C                                   | ONTENT (WT                              | %., N           | IA FOR NATURAL                          |
| ·   |   |  |  | -                                       |   |   |                 |   |
| g) TYPICAL ASH CONTENT (WI  | * % N                                   | A CAD NATH                               |  | h) ANNUAL FUI                           | 21115                                   | ACE (COECIES                            | ~               | 00000000000000000000000000000000000000  |
| GAS):   | <b>∮%9,9 ₹</b> ₹                        | 36 8 936 × 2866 6 1024                   | ras.   | SCF/YEAR, C                             | BAL/YI                                  | AGE (GREWIF)<br>EAR, TON/YEA            | R):             | \$ 60° 80° 160° 1                       |
|   | 00000000000000000000000000000000000000  | 20000000000000000000000000000000000000   | 00000000000<br>201 & & I   | 1000                                    | 200 200 3                               | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  | 8888            |   |
| 23) ARE COMBUSTION EMISSION<br>PROCESS UNIT EMISSIONS?                  |   | STED IU IME                              | SAM  | IE STACK UK CUN:                        | TKUL                                    | va (                                    | _) <sub>Y</sub> | res U no                                |
| IF NO, IDENTIFY THE EXHAUS  | ST PO                                   | INT FOR COM                              | BUS  | TION EMISSIONS:                         |   |   |                 |   |
|   |   |  |  |   |   |   |                 |   |
|   |   |  |  |   |   |   |                 |   |
|   |   |  |  |   |   |   |                 |   |

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|   | APPLICABLE RU  |  |
|---|--|--|
| PROVIDE ANY SPECIFIC EMISSION STANDARD REGULATED AIR POLLUTANT(S) | (6) AND LIMITATION(S) SET BY RULE(S) WHICH A<br>EMISSION STANDARD(S) | ARE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218,204(j)(4), 3.5 LBS/GA<br>REQUIREMENT(8) |
| VOM   | 35 IAC 218.302(b)  | At least 85% recovery of total uncontrolled org. mat.  |
| HAP   | 40CFR 63.362   | 99% reduction  |
| VOM   | 35 IAC218.986(a)   | Capture & Control > 81%  |
|   | LE(S) WHICH ARE APPLICABLE TO THIS EMISSIO                           |  |
| REGULATED AIR POLLUTANT(S)  | RECOROKEEPING RULE(6)  | REQUIREMENT(S)   |
| Standards don't apply to backvent                                 | 40 CFR 63.10   | MACT recordkeeping and reporting   |
| but do apply to WBII AAT  |  |  |
|   |  |  |
| PROVIDE ANY SPECIFIC REPORTING RULE(S) REGULATED AIR POLLUTANT(S) | WHICH ARE APPLICABLE TO THIS EMISSION UNI<br>REPORTING RULE(S)       | RECHAREMENT(S)   |
| Standards don't apply to backvent                                 | 40 CFR 63.10   | MACT recordkeeping and reporting   |
| but do apply to WBII AAT  |  |  |
| PROVIDE ANY SPECIFIC MONITORING RULE(S                            | WHICH ARE APPLICABLE TO THIS EMISSION UN                             |  |
| REGULATED AIR POLLUTANT(S)  | MONITORING RULE(S)   | REQUIREMENT(S)   |
| HAP monitoring applies to   | 40CFR 63.364   | Weekly Scrubber liquor level   |
| WBII AAT  | 40CFR 63.364   | Weekly EO concentration from dry beds  |
|   |  | Weekly pH  |
| PROVIDE ANY SPECIFIC TESTING RULES AND                            | OR PROCEDURES WHICH ARE APPLICABLE TO 1                              | THIS EMISSION UNIT:  |
| REGULATED AIR POLLUTANT(S)  | TESTING RULE(S)  | REQUIREMENT(S)   |
| HAP applies to WBII AAT   | 40 CFR63.365   | Testing of control equipment   |
|   |  |  |
|   |  |  |

| 29) DOES THE EMISSION U<br>OTHERWISE APPLICAB<br>IF YES, THEN LIST BOTI<br>EXEMPTION. PROVIDE<br>SUPPORTING DATA AN<br>ATTACHMENT(S) WHICH | ON. INCLUDE DET/                              | AILED  |  |   |
|--|---|--|--|---|
| \$   | 0° 0° 0 8 8 8° 0° 5 7 8 8                     | 00000000000000000000000000000000000000   | 00000000000000000000000000000000000000                                       |   |
| 30) IS THE EMISSION UNIT   |   | ICE INFORMATION<br>APPLICABLE  | N ves  |   |
| REQUIREMENTS?  |   |  | Ŭ YES  | U NO I                                  |
|  |   | V/SCHEDULE OF COMPLIAN<br>TED AND SUBMITTED WITH T                             |  |   |
| 31) EXPLANATION OF HOW   | INITIAL COMPLIANCE IS TO                      | BE, OR WAS PREVIOUSLY  | , DEMONSTRATED:  | ~~^^0000000000000000000000000000000000  |
| Ethylene Oxide and Pr<br>WBII AAT was tested 0   | opylene oxide usage is l<br>December 13, 2016 | racked monthly.  |  |   |
|  |   |  |  |   |
|  |   |  |  | 8000000                                 |
|  |   |  |  | *************************************** |
|  |   |  |  | *************************************** |
|  |   |  |  |   |
|  |   |  |  |   |
| 32) EXPLANATION OF HOW   | ONGOING COMPLIANCE W                          | ILL BE DEMONSTRATED:   |  |   |
| Records of Ethylene O  | kide (EO) and Propylene                       | Oxide (PO) usage. (mo  | nthly)   | *************************************** |
| *  | •   | level weekly, pH weekly  |  | *************************************** |
| EO concentration is che  | ecked weekly to determi                       | ne proper operation of th  | e Dry Bed Unit.  |   |
|  |   |  |  | *************************************** |
|  |   |  |  | *************************************** |
|  |   |  |  |   |
|  |   |  |  |   |
|  |   |  |  | unnen                                   |
|  |   |  |  |   |
| \$25555566666666666666666666666666666666   | ***************************************       | CORDKEEPING AND I  | \$ | E IR copy a 50 ppm ph. Wrone            |
| DETERMINE FEES, RU   | LE APPLICABILITY OR COM                       | ISSIONS FOR WHICH RECOI<br>PLIANCE. INCLUDE THE UN<br>ICY OF SUCH RECORDS (E.G | IT OF MEASUREME  | NT, THE                                 |
| PARAMETER  | UNIT OF MEASUREMENT                           | METHOD OF MEASUREME  | iki ene  | QUENCY                                  |
| Sterilant Usage  | pounds  | Operating data   | monthly  |   |
| Liquor level   | inches  | Operating data   | weekly   |   |
| EO conc  | ppm   | ***************************************  | 000000000000000000000000000000000000000                                      | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  |
|  | \$ . 2 m                                      | 000000000000000000000000000000000000000  |  |   |
|  | 000000000000000000000000000000000000000       |  |  | ~~~~coooooooooooooooooo                 |
| Liquor level   |   | k /05  |  |   |
|  | 000000000000000000000000000000000000000       |  |  |   |

| RECORDED PARAMET   | TER INCLUDE THE METHOD                                 | ORDS WILL BE CREATED AND NO                                  | PERSON RESPONSIBLE FOR            |
|--|--|--|-----------------------------------|
| RECORDKEEPING, AM<br>PARAMETER                             | ID TITLE OF PERSON TO CO<br>METHOD OF<br>RECORDKEEPING | NTACT FOR REVIEW OF RECORE<br>TITLE OF<br>PERSON RESPONSIBLE | DS:<br>TITLE OF<br>CONTACT PERSON |
| Sterilant usage  | Operating report                                       | General Manager  | EH&S                              |
| Liquor Level   | PM records   | General Manager  | EHAS                              |
|  |  |  |                                   |
| EO conc  | PM Records   | General Manager  | EH&S                              |
|  |  |  |                                   |
|  |  |  |                                   |
| c) IS COMPLIANCE OF THE<br>THE RECORDS?<br>IF NO, EXPLAIN: | EMISSION UNIT READILY D                                | EMONSTRATED BY REVIEW OF                                     | Ø yes O no                        |
|  | NDILY AVAILABLE FOR INSPE<br>ENCY UPON REQUEST?        | CTION, COPYING AND   | Ø YES O NO                        |
| 34a) DESCRIBE ANY MONIT<br>COMPLIANCE:                     | ORS OR MONITORING ACTIV                                | /ITIES USED TO DETERMINE FEE                                 | S, RULE APPLICABILITY OR          |
|  | evel of the scrubber liquo                             |  | •                                 |
| Monitor the EtO concent                                    | tration entering and exitin                            | g the AATDry Beds.   |                                   |
|  |  | E.G., VOM EMISSIONS TO ATMOS                                 | SPHERE)?                          |
| Level of scrubber liquor.<br>EtO levels from the AAT       |  |  |                                   |
|  | uly ucus.  |  |                                   |
| c) DESCRIBE THE LOCATION                                   | ON OF EACH MONITOR (E.G.,                              | IN STACK MONITOR 3 FEET FRO                                  | M EXIT):                          |
|  |  |  |                                   |
|  |  |  |                                   |
|  |  |  |                                   |

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| 34d) IS EACH MONITOR EQUIPPED W  | /ITH A RECORDING DEVICE?   | <b>&gt;</b>                             | *************************************** | O yes                                  | ONO                                     |
|--|--|---|---|--|---|
| IF NO, LIST ALL MONITORS WITHO   | UT A RECORDING DEVICE:   |   |   | 490000 1 00: 00                        | 2000000 × 0 000                         |
| N/A  |  |   |   |  |   |
|  |  |   |   |  |   |
|  |  |   |   |  |   |
|  |  |   |   |  |   |
|  |  | 00000000000000000000000000000000000000  | 000000000000000000000000000000000000000 |  | ~~aaaaaggggggaaaaaaaaaaaaaa             |
| e) IS EACH MONITOR REVIEWED FOR<br>BASIS?  | ACCURACY ON AT LEAST A   | I QUARTERL                              | ¥                                       | U YES                                  | UNO                                     |
| IF NO, EXPLAIN:  |  |   |   |  |   |
| N/A  |  |   |   |  |   |
|  |  |   |   |  |   |
|  |  |   |   |  |   |
|  |  |   |   |  |   |
|  | ······00000000000000000000000000000000   |   | DXC                                     |  |   |
| 1) IS EACH MONITOR OPERATED AT A     IN OPERATION?   | ALL TIMES THE ASSOCIATED   | EMISSION I                              | UNIT IS                                 | O yes                                  | Ø NO                                    |
| IF NO, EXPLAIN:  |  |   |   |  |   |
| No continuous monitoring is requi  | ired.  |   |   |  |   |
|  |  |   |   |  |   |
|  |  |   |   |  |   |
|  |  |   |   |  |   |
|  |  |   |   | ~~                                     |   |
| 35) PROVIDE INFORMATION ON THE M<br>PURPOSES OF THE DETERMINATION  |  |   |   |  |   |
| DATE, TEST METHOD USED, TESTI<br>SUMMARY OF RESULTS. IF ADDITI   | NG COMPANY, OPERATING  | CONDITIONS                              | EXISTING                                | DURING THE 1                           |   |
| was transfer the same state and the same state of the same state o | non c py nago non i a vino nom i non i nidopi box noci non com g ir n  | OPERAT                                  |   | estancia properto se                   |   |
| TEST DATE TEST METHOD  | TESTING COMPANY  | CONDITI                                 |   | SUMMARY OF                             | RESULTS                                 |
| 1/21/03  | Kremer Env.  | Normal                                  |   | > 99% effici                           | ency                                    |
|  |  |   |   | 00000A                                 |   |
|  |  |   |   |  |   |
|  | 000000000000000000000000000000000000000  | *************************************** | ~~~~~                                   | 30000000000000000000000000000000000000 | *************************************** |
| <u> </u>   |  | E-000000000000000000000000000000000000  |   |  |   |
| 36) DESCRIBE ALL REPORTING REQUII<br>SUBMITTALS TO THE AGENCY:   | REMENTS AND PROVIDE TH   | E TITLE AND                             | FREQUEN                                 | Y OF REPORT                            | ~~~000000000000000000000000000000000000 |
|  | אירי איבול אונו (אוני אוני לאוני אוני אוני א<br>איני איני אוני אוני אוני אוני איני אוני או |   |   | 20000000000000000000000000000000000000 |   |
| REPORTING REQUIREMENTS   | TITLE OF REPORT  |   |   | FREQUENCY                              | 0000000000                              |
| Annual emissions report  | Annual emissions rep   | noc                                     | annual                                  | 0222022                                |   |
| 00/2000  |  | 1                                       |   | •                                      |   |
| Excess emissions   | Excess emissions   |   | semi-an                                 | nual                                   | 000000000000000000000000000000000000000 |

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|                             |          |                             |   |                             | (37)                        | EMISSION        | INFORMATION               |   |                               |              |                               |
|-----------------------------|----------|-----------------------------|---|-----------------------------|-----------------------------|-----------------|---------------------------|---|-------------------------------|--------------|-------------------------------|
|                             |          |                             | O 'ACTUAL EMISSION RATE  ALLOWABLE BY RULE EMISSION RATE  "PERMITTED EMISSION RATE" |                             |                             |                 |                           |   | SION RATE                     |              |                               |
| REGULATED AIR<br>POLLUTANT  |          | LBS PER<br>HOUR<br>(LBSAHR) | TONS PER<br>YEAR<br>(TONS/YR)   | <sup>3</sup> OTHER<br>TERMS | <sup>3</sup> OTHER<br>TERMS | <sup>4</sup> pM | <sup>5</sup> PATE (UNITS) | APPLICABLE<br>RULES                     | TONS PER<br>YEAR<br>(TONS/YR) | RATE (UNITS) | TONS PER<br>YEAR<br>(TONS/YR) |
| CARBON                      | Maximum: |                             |   |                             |                             |                 | ( )                       |   |                               |              |                               |
| MONOXIDE (CO)               | TYPICAL: |                             | ***************************************   |                             |                             |                 | ( )                       |   |                               |              |                               |
| LEAD                        | MAXIMUM  |                             |   |                             |                             |                 | ( )                       |   |                               |              |                               |
|                             | TYPICAL: |                             |   |                             |                             |                 | ( )                       | *************************************** |                               |              |                               |
| NITROGEN                    | MAXIMUM: |                             |   |                             |                             |                 | ( )                       | •••••                                   |                               |              |                               |
| OXIDES (NOx)                | TYPICAL: |                             |   |                             | :                           |                 | ( )                       | *************************************** |                               |              |                               |
| PARTICULATE                 | MAXIMUM: |                             |   |                             | :                           |                 | ( )                       | ••••••                                  |                               |              |                               |
| MATTER (PART)               | TYPICAL: |                             |   |                             |                             |                 | ( )                       |   |                               |              |                               |
| PARTICULATE<br>MATTER <= 10 | MAXIMUM: |                             |   |                             |                             |                 | ( )                       |   |                               |              |                               |
| MICROMETERS<br>(PM10)       | TYPICAL: |                             |   |                             |                             |                 | ( )                       |   |                               |              |                               |
| SULFUR                      | MAXIMUM  |                             |   |                             |                             |                 | ( )                       |   |                               |              |                               |
| DIOXIDE (SO2)               | TYPICAL: |                             |   |                             |                             |                 | ( )                       |   |                               |              |                               |
| VOLATILE<br>ORGANIC         | MAXIMUM: |                             |   |                             |                             |                 | ( )                       |   |                               |              |                               |
| MATERIAL (VOM)              | TYPICAL: |                             |   |                             |                             |                 | ( )                       |   |                               |              |                               |
| OTHER,<br>SPECIFY:          | MAXIMUM: | See Ex.                     | 220-a   |                             |                             |                 | ( )                       |   |                               |              |                               |
|                             | TYPICAL: |                             |   |                             |                             |                 |                           |   |                               |              |                               |
| EXAMPLE:<br>PARTICULATE     | MAXIMUM  | 5.00                        | 21.9  | 0.3<br>GR/OSCF              |                             | 1               | 6.0 (LBS/HR)              | 212.321                                 | 26.28                         | 5.5 LBS/HR   | 22                            |
| MATTER                      | TYPICAL: | 4,00                        | 14.4  | 0.24<br>GR/DSCF             |                             | 4               | 5.5 (LBS/HR)              | 212.321                                 | 19.80                         |              |                               |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-6.

<sup>1</sup> CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS. PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.

PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)

DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).

<sup>&</sup>lt;sup>5</sup>RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

|                        |                            | (3                                      | 8) HAZARDOUS                            | AIR POLLUTAI                            | IT EMISSION I                          | NFORMATION      | 1   |   |
|------------------------|----------------------------|---|---|---|--|-----------------|---|---|
|                        |                            | 000000000000000000000000000000000000000 | O 1ACTU<br>O 1UNC                       | AL EMISSION RA<br>ONTROLLED EMIS        | TE<br>SION RATE                        |                 | ALLOWABLE BY RI                               | JLE                                     |
| NAME OF HAP<br>EMITTED | <sup>2</sup> CAS<br>NUMBER |   | POUNDS PER<br>HOUR<br>(LBS/HR)          | TONS PER<br>YEAR<br>(TONS/YR)           | <sup>3</sup> OTHER<br>TERMS            | <sup>4</sup> ом | <sup>5</sup> RATE OR STANDARD                 | APPLICABLE<br>RULE                      |
| Ethylene Oxide         | 75-21-8                    | MAXIMUM:<br>TYPICAL:                    | See Exhibit                             | 220-а                                   | 00000000000000000000000000000000000000 |                 |   | 000000000000000000000000000000000000000 |
| Propylene Oxide        | 75-56-9                    | MAXIMUM;                                | See Exhibit                             | 220-a                                   |  |                 |   |   |
| <b></b>                |                            | TYPICAL:<br>WAXIMUM:                    |   |   |  |                 |   |   |
| ****                   |                            | TYPICAL:                                |   |   |  |                 |   | 0000                                    |
|                        |                            | MAXIMUM:                                |   |   |  |                 |   |   |
| <b></b>                |                            | TYPICAL:<br>MAXIMUM:                    |   | *************************************** |  |                 |   |   |
| •                      |                            | TYPICAL                                 | ······································  |   |  |                 |   |   |
|                        |                            | MAXIMUM:                                | *************************************** |   |  |                 |   |   |
|                        |                            | TYPICAL<br>MAXIMUM                      |   | <b></b>                                 |  |                 |   |   |
|                        |                            | TYPICAL:                                | ······                                  |   |  |                 |   |   |
| <u></u>                |                            | WAXIMUM:                                |   |   |  |                 |   |   |
| <b>8</b>               |                            | TYPICAL                                 | ····                                    |   |  |                 |   |   |
| EXAMPLE:<br>Benzene    | 71432                      | MAXIMUM:<br>TYPXCAL:                    | 10.0<br>8.0                             | 1.2<br>0.8                              |  | 2 2             | 98% by wt control device<br>leak-light trucks | CFR 61<br>61.302(b),(d)                 |

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-8.

STRATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

<sup>1</sup>PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY. <sup>2</sup>CAS - CHEMICAL ABSTRACT SERVICE NUMBER.

PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GROSCF, ETC.).

OM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).

| EXHAUST POINT INFORMATION  |   |   |   |  |  |  |  |  |  |  |
|--|---|---|---|--|--|--|--|--|--|--|
| THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.   |   |   |   |  |  |  |  |  |  |  |
| 39) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:   |   |   |   |  |  |  |  |  |  |  |
| WBII AAT Scrubber with dry bed   |   |   |   |  |  |  |  |  |  |  |
| 40) DESCRIPTION OF EXHAUST POINT (STACK, VENT. ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS. |   |   |   |  |  |  |  |  |  |  |
| Outside Stack  |   |   |   |  |  |  |  |  |  |  |
| 41) DISTANCE TO NEAREST PLANT BOI  | JNDARY FROM EXH                         | IAUST POINT DISCH   | ARGE (FT):                              |  |  |  |  |  |  |  |
| approx 100 feet  |   |   |   |  |  |  |  |  |  |  |
| 42) DISCHARGE HEIGHT ABOVE GRADI   | E (FT):                                 | ••••••  |   |  |  |  |  |  |  |  |
| approx 32 feet   |   |   |   |  |  |  |  |  |  |  |
| 43) GOOD ENGINEERING PRACTICE (G   | EP) HEIGHT, IF KNC                      | )WN (FT):   |   |  |  |  |  |  |  |  |
| Unknown  |   |   |   |  |  |  |  |  |  |  |
| 44) DIAMETER OF EXHAUST POINT (FT)<br>1.128 TIMES THE SQUARE ROOT OF   | an agang gyano ya yang yana ya          | N CIRCULAR EXHAU<br>inch <del>e</del> s                         | JST POINT, THE DIAMETER IS              |  |  |  |  |  |  |  |
| 45) EXIT GAS FLOW RATE   | a) MAXIMUM (ACF                         | M):   | b) TYPICAL (ACFM):                      |  |  |  |  |  |  |  |
|  | 11                                      | ,500  | 11,500                                  |  |  |  |  |  |  |  |
| 46) EXIT GAS TEMPERATURE   | a) MAXIMUM (°F):                        |   | b) TYPICAL (°F):                        |  |  |  |  |  |  |  |
|  | app                                     | rox 75  | approx 75                               |  |  |  |  |  |  |  |
| 47) DIRECTION OF EXHAUST (VERTICA  | L. LATERAL, DOWN                        | WARD):  | *************************************** |  |  |  |  |  |  |  |
| Vertical   |   |   |   |  |  |  |  |  |  |  |
| 48) LIST ALL EMISSION UNITS AND COP  | ITROL DEVICES SE                        | RVED BY THIS EXH  | NUST POINT:                             |  |  |  |  |  |  |  |
| NAME   |   | FLO   | W DIAGRAM DESIGNATION                   |  |  |  |  |  |  |  |
| <sup>a)</sup> W8II Aeration Rooms (curren  | ()                                      | AR  |   |  |  |  |  |  |  |  |
| <sup>b)</sup> Sterilizer Backvent SC4  |   | Backvent  |   |  |  |  |  |  |  |  |
| c) Sterlizer Chambers SC4 (cur   | rent)                                   | vacuum pump   |   |  |  |  |  |  |  |  |
| d)   |   |   |   |  |  |  |  |  |  |  |
| e)   |   |   |   |  |  |  |  |  |  |  |
|  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |   |   |  |  |  |  |  |  |  |
| THE FOLLOWING INFORMATION NEED ONLY 49a1 LATITUDE:   | BE SUPPLIED IF READ                     | ILY AVAILABLE:<br>T b) LONGITUDE:                               |   |  |  |  |  |  |  |  |
| To some up you are a till a few than the con-  |   | ~ 5 × 00 × 000 8 8 00 80 50 50 50 50 50 50 50 50 50 50 50 50 50 |   |  |  |  |  |  |  |  |
| 50) UTM ZONE:  | b) UTM VERTICAL                         | (KM):   | c) UTM HORIZONTAL (KM):                 |  |  |  |  |  |  |  |
|  |   |   |   |  |  |  |  |  |  |  |



### **EXHIBIT 220-A**

## 2017 Emission Calculations for Commercial Sterilization Chambers at Sterigenics US LLC Willowbrook

| 2017 Usage                  |        | Willowbrook I | Willowbrook II | Willowbrook I & II |
|-----------------------------|--------|---------------|----------------|--------------------|
| Ethylene Oxide (EO) Usage:  | lbs/γr | 284,077       | 139635         | 423,712            |
| Propylene Oxide (PO) Usage: | lbs/γr | 0             | 0              | 0                  |

|   | EO Uncontrolled<br>Emissions | PO Uncontrolled<br>Emissions | Required Control<br>Efficiency | EO Controlled<br>Emissions | PO Controlled<br>Emissions |
|---|------------------------------|------------------------------|--------------------------------|----------------------------|----------------------------|
| 2017 Emissions for Willowbrook I and II | lb/yr                        | lb/γr                        |                                | lb/yr                      | lb/yr                      |
| Sterilizer Vacuum Pump Emissions (95%)  | 402526.4                     | 0.0                          | 99.00%                         | 4025.3                     | 0.0                        |
| Sterilizer Back Vent Emissions (1%)     | 4237.1                       | 0.0                          | 0                              | 4237.1                     | 0.0                        |
| Aeration Emissions (4%)                 | 16948.5                      | 0.0                          | 99.00%                         | 169.5                      | 0.0                        |
| Total                                   | 423712                       | 0                            |                                | 8431.9                     | 0.0                        |

| 2017 HAD 2/082 C                    | 8432 | lb/yr     |
|-------------------------------------|------|-----------|
| EVEN UMEN A CHILL CHICA ETHISSICHES | 4.22 | tons/yr [ |

**Based on required Control Efficiencies** 

## Assumptions:

- 1. 95% of all emissions are drawn off in the sterilization chamber.
- 2. 1% of all emissions are drawn off in the back vent.
- 3. 4% of all emissions are drawn off in the aeration room.
- 4. The scrubbers destruction efficiency is required to be a minimum of 99.0% for each scrubber system
- 5. Previous performance testing of each scrubber demonstrated control efficiencies of at least 99.9%.
- 6. Willowbrook I includes SC-1, 2, 3, and 5. Willowbrook II includes SC-4.
- 7. Boiler emissions are not included.

### **EXHIBIT 220-B**

# Potential To Emit for Commercial Sterilization Chambers at Sterigenics US LLC in Willowbrook, IL

| Maximum Permitted Usage          |        | WBI    | WB II  | W81&II <sup>5</sup> |
|----------------------------------|--------|--------|--------|---------------------|
| Ethylene Oxide Permitted Usage:  | lbs/yr | 840000 | 244200 | 1084200             |
| Propylene Oxide Permitted Usage: | lbs/yr | 33600  | 2442UU | 33600               |
| Total HAP and VOM Usage:         | lbs/yr | 873600 | 244200 | 1117800             |

**Proposed Potential to Emit** 

|                          |  | Current Potential to Emit Calculation  |   |                                      | Calculation                                |                                      |  |
|--------------------------|--|--|---|--------------------------------------|--|--------------------------------------|--|
|                          |  | HAP Uncontrolled<br>Emissions<br>lb/yr | Currently<br>Required Control<br>Efficiency | HAP Controlled<br>Emissions<br>lb/yr | Proposed<br>Required Control<br>Efficiency | HAP Controlled<br>Emissions<br>ib/yr |  |
| 184:112                  | Sterilizer Vacuum Pump Emissions (95%) | 829920                                 | 99.00%                                      | 8299.2                               | 99.0%                                      | 8299.2                               |  |
| Willowbrook 1            | Sterilizer Back Vent Emissions (1%)    | 8736                                   | 0   | 8736.0                               | 99.0%                                      | 87.4                                 |  |
| (SC-1, SC-2, SC-3, SC-5) | Aeration Emissions (4%)                | 34944                                  | 99.00%                                      | 349.4                                | 99.0%                                      | 349.4                                |  |
| Willowbrook Z            | Sterilizer Vacuum Pump Emissions (95%) | 231990                                 | 99.00%                                      | 2319.9                               | 99.0%                                      | 2319.9                               |  |
|                          | Sterilizer Back Vent Emissions (1%)    | 2442                                   | 0   | 2442.0                               | 99.0%                                      | 24.4                                 |  |
| (SC-4)                   | Aeration Emissions (4%)                | 9768                                   | 99.00%                                      | 97.7                                 | 99.0%                                      | 97.7                                 |  |

| Potential to Emit of HAP and VOM       | Exis    | ting    | Ne      | ?W      |
|--|---------|---------|---------|---------|
| Willowbrook 1 Sterilization            | 17384.6 | lb/yr   | 8736.0  | lb/yr   |
| Willowbrook 2 Sterilization            | 4859.6  | lb/yr   | 2442.00 | lb/yr   |
| Total for Willowbrook Sterilization    | 22244.2 | lb/yr   | 11178.0 | lb/yr   |
| I OLAI JOI VYIIIOWDIOUK SLEIIIIZALIUII | 11.1    | tons/yr | 5.6     | tons/yr |

#### Notes

- \*Ethylene Oxide and Propylene Oxide are HAPs and VOMs
- 1. 95% of all emissions are drawn off in the sterilization chamber.
- 2. 1% of all emissions are drawn off in the back vent.
- 3. 4% of all emissions are drawn off in the aeration room.
- 4. The scrubbers destruction minimum efficiency is 99.0% for each scrubber system (40 CFR Part 63 Subpart O)
- 5. Assume combined WBII usage limit is for EO for calculations
- . 6. Boiler emissions are not included.

## EXHIBIT 220-C

# Proposed Permit Limits for Commercial Sterilization Chambers at Sterigenics US LLC in Willowbrook, IL

# STERILIZATION USAGE LIMITATIONS

|                             | Curr     | ent Permit Limil | is .      | Propo    | sed Limits (No Cl | aange)    |
|-----------------------------|----------|------------------|-----------|----------|-------------------|-----------|
|                             | EO       | PO               | VOM       | EO       | PO                | VOM       |
| Usage                       | lb/month | lb/month         | tons/year | lb/month | lb/month          | tons/year |
| Willowbrook 1 SC-1, 2, 3, 5 | 70000    | 2800             |           | 70000    | 2800              |           |
| Willowbrook 2 SC-4          | 408      | 00               | 122.1     | 40       | 300               | 122.1     |

## **STERILIZATION EMISSION LIMITATIONS**

|                             | Proposed    | Limits (Same a | s PTE)   |
|-----------------------------|-------------|----------------|----------|
| VOM Emissions (tons/year)   | Vacuum Pump | BackVent       | Aeration |
| Willowbrook 1 SC-1, 2, 3, 5 | 4,15        | 0.044          | 0.175    |
| Willowbrook 2 SC-4          | 1.16        | 0.01           | 0.05     |

|                             |       | rmitted Emissio |           | Construction |
|-----------------------------|-------|-----------------|-----------|--------------|
| Willowbrook 1               | lb/hr |                 | tons/year | Permit#      |
| VOM West Aeration Emissions | 3.60  |                 | 15.77     | 90080038     |
|                             |       |                 |           |              |

| Willowbrook 2           |      |      |          |
|-------------------------|------|------|----------|
| VOM Vauum pump Emission | 0.2  | 1.16 | 11050010 |
| VOM Back vent Emissions | 0.21 | 1.22 | 11050010 |
| VOM Total Emissions     | 0.41 | 2.38 | 11050010 |
| VOM Aeration Emissions  |      | 0.05 | 11050010 |

#### Note

\* Boiler emissions are not included.



# Illinois Environmental Protection Agency

Bureau of Air • 1021 North Grand Avenue East • P.O. Box 19506 • Springfield • Illinois • 62794-9506

## FEE DETERMINATION FOR CONSTRUCTION PERMIT APPLICATION

| 6                     | MANA da |                             | 3smmmmmggggg00000   | 30000000000000000000000000000000000000 | FOR AG  | ENCY                   | ISE OI                                 | VL Y                                   |   | <u>a</u> Mhilinninininininingoooooo |   |
|-----------------------|---|-----------------------------|---------------------|--|---|------------------------|--|--|---|-------------------------------------|---|
|                       |   | ID Numbe                    | r:                  |  |   | Permit #:              | A0000000000000000000000000000000000000 |  |   | ginnonnonnong gang ditte            |   |
|                       |   | Comp                        | ete                 | ☐ Incomp                               | lete  | Date Corr              | piete:                                 | mmmgg000000000000000000000000000000000 |   | ~~~                                 |   |
|                       |   | Check Nur                   | nber:               |  |   | Account N              | lame:                                  | www.componence.                        | *************************************** |                                     |   |
| ap <sub>l</sub><br>En | plicatic<br>vironm                          | on must inc<br>nental Prote | iude pa<br>ection A | yment in full t                        |   | mplete. N              | lake ch                                | eck or money                           | order (                                 | payable t                           |   |
| So                    | urce  | Informati                   | on                  |  |   |                        |  |  |   |                                     |   |
| 1.                    | Sourc                                       | e Name:                     | Sterig              | enics US, LL(                          | 3   |                        |  |  | ~~~                                     |                                     |   |
| 2.                    | Projec                                      | ct Name:                    | Back '              | Vent Emissio                           | ns Control  | ,conommonor:1000000000 | 3.                                     | Source ID #:                           | (if app                                 | licable)                            | 043110AAC                                   |
| 4.                    | Conta                                       | ct Name:                    | Laura               | Hartman                                | ***************************************                     |                        | <b></b> 5.                             | Contact Pho                            | ne #:                                   | 630-92                              | 8-1724                                      |
| Fe                    | e Det                                       | erminatio                   | ·n                  |  |   |                        |  |  |   |                                     |   |
| 6.                    | The b                                       | oxes below                  | are au              | tomatically ca                         | slculated.  |                        |  |  |   |                                     |   |
|                       | Section                                     | on 1 Subtot                 | al _                | \$0.00                                 | + Section 2,  | 3 or 4 Su              | btotal                                 | \$500.                                 | 00                                      | 22.                                 | \$500.00                                    |
| e                     | - At  | A. 64-4                     |                     |  |   | 8                      |  |  |   | 1000000                             | Grand Total                                 |
| 7.                    | Your a                                      | application i               | will fall           | under only or                          | se of Submitte<br>re of the following<br>purposes of this f | ; five cate            | gories (                               | described belo                         | ow. Ch                                  | eck the l                           | box that applies.                           |
|                       | 8   |                             |                     |  | it is required to o   |                        | AAPP ~                                 | armit                                  |   |                                     |   |
|                       |   | Syntheti                    | c Mino              |  | •   |                        | -                                      |  | tinap                                   | emit to a                           | svoid CAAPP permit                          |
|                       |   | Non-Maj                     | or Sou              | rce is a sour                          | e that is not a m   | ajor or sy             | nthetic i                              | minor source.                          |   |                                     |   |
| Z                     |   |                             |                     | t status chant<br>d to Section 2       | ge or with status   | change fr              | om syn                                 | thetic minor to                        | major                                   | source                              |   |
|                       | Exis  | ting non-mi                 | ajor sou            | ırce that will t                       | ecome synthetic   | minor to               | major s                                | ource. Proce                           | ed to S                                 | ection 4.                           |   |
|                       | New   | major or s                  | ynthetic            | c minor source                         | s. Proceed to Sc  | ection 4.              |  |  |   |                                     | \$0.00                                      |
|                       | New   | non-major                   | source              | . Proceed to                           | Section 3.  |                        |  |  |   |                                     | Section 1 Subtotal                          |
|                       | ager  | ncy error ar                | ıd if the           | request is re                          | / request to corre<br>ceived within the<br>nd 4. Proceed d  | deadline               | for a pe                               | ermit appeal to                        |   |                                     |   |
| app                   | Mication                                    | r being denie               | d and p             |  |   |                        |  |  |   |                                     | ould result in the<br>his information. This |
| Sec                   | ction.                                      | 2: Specia                   | l Case              | Filing Fee                             |   |                        |  |  |   |                                     |   |
|                       |   |                             |                     |  | addresses one<br>actly to Section                           |                        |  |  |   |                                     | opriate boxes, skip<br>as appropriate.      |
|                       | Ø   | Addition                    | or repl             | acement of                             | control devices   | on perm                | itted u                                | nits.                                  |   |                                     |   |
|                       |   | Pilot proj                  | ects/tri            | al burns by                            | a permitted uni   | t                      |  |  |   |                                     |   |
|                       |   | Land ren                    | nediati             | on projects                            |   |                        |  |  |   |                                     | \$500.00                                    |
|                       |   | Revision:                   | s relate            | ed to method                           | dology or timing  | for emis               | ssion te                               | esting                                 |   |                                     |   |
|                       |   |                             |                     |  | hange to a perr   | -                      |  | **                                     |   |                                     |   |
|                       | 32-277<br>-FEE                              | '6<br>Rev. 1/2012           |                     |  | Application Pag   | je <u> </u>            | <u> 2</u>                              | •••••                                  |   |                                     | Page 1 of 2                                 |

#### Section 3: Fees for Current or Projected Non-Major Sources

- This application consists of a single new emission unit or no more than two modified emission units. (\$500 fee)
- This application consists of more than one new emission unit or more than two modified units. (\$1,000 fee)
- This application consists of a new source or emission unit subject to Section 39.2 of the Act (i.e., Local Siting Review); a commercial incinerator or a municipal waste, hazardous waste, or waste tire incinerator; a commercial power generator; or an emission unit designated as a complex source by agency rulemaking. (\$15,000 fee)
- 12. A public hearing is held (see instructions). (\$10,000 fee)

13. Section 3 subtotal. (lines 9 through 12 - entered on page 1)

13. \$0.00

#### Section 4: Fees for Current or Projected Major or Synthetic Minor Sources

| 8 a second a second a target                            | 14. For the first modified emission unit, enter \$2,000.  |   |   |
|---|---|---|---|
| Application contains<br>modified emission<br>units only | 15. Number of additional modified emission<br>units ≈ x \$1,000.  |   |   |
|   | 16. Line 14 plus line 15, or \$5,000, whichever is less.  | 16                                      | \$0.00                                  |
| Application contains                                    | 17. For the first new emission unit, enter \$4,000.   |   | *************************************** |
| new and/or modified<br>emission units                   | 18. Number of additional new and/or modified emission units = x \$1,000.  |   |   |
|   | 19. Line 17 plus line 18, or \$10,000, whichever is less.   | 19.                                     | \$0.00                                  |
| Application contains netting exercise                   | 20. Number of individual pollutants that rely on a netting exercise or contemporaneous emissions decrease to avoid application of PSD or nonattainment area NSR = x \$3,000.  | 20                                      | \$0.00                                  |
|   | 21. If the new source or emission unit is subject to Section 39.2 of the Act (i.e. siting); a commercial incinerator or other municipal waste, hazardous waste, or waste tire incinerator; a commercial power generator; or one or more other emission units designated as a complex source by Agency rulemaking, enter \$25,000. |   |   |
| Additional<br>Supplemental                              | 22. If the source is a new major source subject to PSD, enter \$12,000.   | *************************************** | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~  |
| Fees  | 23. If the project is a major modification subject to PSD, enter \$6,000.   |   |   |
|   | 24. If this is a new major source subject to nonattainment area (NAA)<br>NSR, enter \$20,000.   |   |   |
|   | 25. If this is a major modification subject to NAA NSR, enter \$12,000.   |   |   |
|   | 26. If the application involves a determination of MACT for a pollutant and the project is not subject to BACT or LAER for the related pollutant under PSD or NSR (e.g., VOM for organic HAP), enter \$5,000 per unit for which a determination is requested or otherwise required. x \$5,000.                                    | 26.                                     | \$0.00                                  |
|   | 27. If a public hearing is held (see instructions), enter \$10,000.   | <b>***********</b>                      | A*************************************  |
| 28 Section & cultota                                    | (line 16 and lines 19 through 28) to be entered on page1  | 28.                                     | \$0.00                                  |

#### Section 5: Certification

NOTE: Applications without a signed cartification will be deemed incomplete.

| contained in this fee application form is true, accurate an | d complete.                      |
|---|----------------------------------|
| by: <u>Olavia Herks</u><br>Signature                        | Manager, EH&S Title of Signatory |
| Laura Hariman   | 05 June 2018                     |
| Typed or Printed Name of Signatory                          | Date                             |
|   |                                  |

29. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the information

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